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"DIAMOND QUALITY"

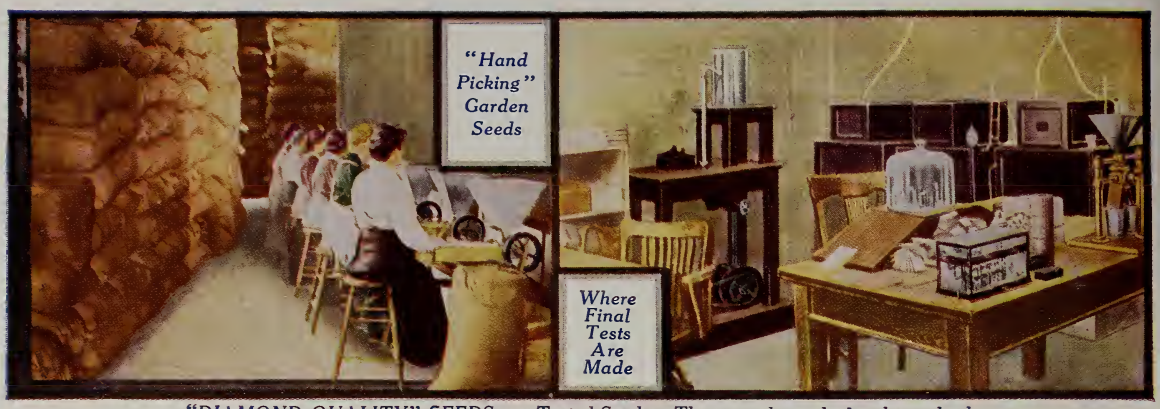
TESTED

SEEDS

Annual Catalog

SPOKANE
Diamond SEED Quality
COMPANY
TRADE MARK

SPOKANE, WASH.



"Hand Picking" Garden Seeds

Where Final Tests Are Made

"DIAMOND QUALITY" SEEDS are Tested Seeds. They are above the legal standard.

906-8-10 FIRST AVENUE
Home of the Spokane Seed Company. An up-to-date seed store with competent courteous salesmen to serve you.

At our large warehouse we have ample trackage and carload business is handled without delay.

Right in the heart of the "Inland Empire" our direct trade connections, splendid facilities and thorough organization enable us to give you unequaled service and better values than are obtainable elsewhere. Our Diamond Trade-mark stands for Quality, Satisfaction and Full Value.

SERVICE In our various departments competent men and women are actively engaged in serving our customers. Among these are practical experts, specially fitted by training and experience to confer with you on any subject pertaining to our business. Their suggestions or recommendations incur no obligation on your part and may save you needless expense and disappointment. *You should take advantage of this service.*

WHAT OUR DIAMOND TRADE MARK STANDS FOR. By reason of our business standing and the experience gained in serving the growers of the Northwest, we have established trade relations with the world's best producers and sources of supply. Only by such connections is it possible, in the seed trade, to obtain the select true stocks—the best of the season's production; and when you see our *DIAMOND* Trade Mark on your packet of seeds or item of merchandise you can feel that it is a mark of real quality—*THE BEST OBTAINABLE.*

SPOKANE Diamond SEED Quality COMPANY TRADE MARK

FERTILIZERS **Are not an expense but are a profitable investment returning many times their cost.**

We are large dealers and manufacturers and can save you money on any amount you buy. *Guaranteed Analysis on Every Bag.* Be sure to get our Special Booklet, "FERTILIZERS"—Tells how and when to apply, gives analyses of fertilizing materials, crop requirements and market values.—*Sent free on request.*

FOR PRICES and information on Fertilizers, see pages 60 and 61 of this catalog.

Spokane Seed Company's

COMPLETE SEED ANNUAL

For 1916

WESTERN PRODUCTS won highest honors and achieved international fame at the Panama-Pacific Exposition, demonstrating our wonderful resources and the agricultural and horticultural advancement made, and every Western grower should take advantage of the opportunity we offer to secure Western grown, acclimated seeds and plants.

OUR WESTERN GROWN SEEDS AND PLANTS and the select varieties we list will prove most profitable and satisfactory for either commercial or home plantings. Wherever possible, stocks are grown under our direct supervision, and only varieties that in our experience are dependable and desirable are offered, but our extensive trade connections enable us to secure anything in commerce to your special order on short notice.

OUR 1916 CATALOG AND PLANTER'S GUIDE has been carefully re-written, enlarged to 164 pages, and no expense has been spared to make it a safe and dependable guide that will aid you in the selection of seeds, plants and appliances for profitable and economical production. The suggestions and recommendations represent the experience of practical, successful men and the best authorities of the Government and State Agricultural Stations.

THE HOME GARDEN.—We always urge the planting of a home garden. Even a small space planted in rotation will produce an astonishing supply of delicious, fresh vegetables that will reduce living expenses. The care of your home garden, whether it be vegetables or flowers, will prove a healthful and profitable diversion.

GOOD SEEDS, SQUARE DEALING, RIGHT PRICES and a willingness to anticipate the demands of our trade have developed our present splendid facilities and equipment, and we are better prepared than ever to give you prompt, efficient service.

Spokane Seed Company

WHEN AND HOW TO ORDER

SEND in your combined orders for seeds, plants, supplies, etc., at once. We are prepared to fill orders as soon as this Catalog reaches you, and if you do not want all sent now we will send part now and the balance later. The advantage of this is that your order is entered and filled or stock reserved so the complete order, or any part, can be sent upon notice without delay. If you want part or all of your order held, state it distinctly with date when shipment is to be made. All orders for potatoes, plants, and other perishable goods are carefully booked on receipt, and filled in rotation as soon as weather permits. If shipped early, they are at buyer's risk.

USE OUR ORDER BLANKS.—Fill out the spaces giving postoffice and shipping point. It is best not to write letters on the same sheet as your order. ☛ *Do not forget to sign your name.*

SEEDS BY MAIL are postpaid in lots of **one pound or less** of a variety—**unless otherwise stated. See parcel post rates for larger lots.**

LARGE ORDERS.—Any dealer, market gardener, institution or individual wishing seed in large quantities, is requested to mail us a list of what is wanted, and we will promptly return it with the very lowest market prices. **A letter of inquiry may save you dollars** if you want to buy in quantity.

BY FREIGHT OR EXPRESS.—In ordering vegetable or flower seeds to be **sent by freight or express at your expense,** deduct postage from single pound postpaid prices.

PREPAY STATIONS.—When you send in orders to go by freight or express be sure that you add money enough to pay freight charges if your station is a prepay point, which is **always the case where there is no regular agent.**

COMPLAINTS OR PRAISES.—If you are well pleased with our goods and the manner of doing business, tell everyone. If you are not, tell us, so we can please you. Our best efforts will be put forth in filling all orders carefully and promptly in a way that will please you.

☛ **USE MONEY-ORDERS, POSTOFFICE OR EXPRESS, Bank Drafts or Registered Letters. DO NOT** send *personal checks*, as your order may be delayed for their collection or identification Stamps will be accepted on small orders.

BE SURE TO ORDER EARLY—BEFORE STOCKS ARE DEPLETED.

NOTE.—We use every precaution in procuring fresh, pure and reliable seeds, etc., but we, in common with other responsible seed houses, sell our goods subject to the following disclaimer, it being that adopted by the American Seed Trade Association, i. e.:—We give no warranty, express or implied, as to description, quality, productiveness or any other matter of any seeds, bulbs, nursery stock, roots or plants sent out and will not be in any way responsible for the crop. If the purchaser does not **accept** the goods on these terms they are to be returned at once.—Spokane Seed Company.

"Diamond Quality" VEGETABLE SEEDS

DIAMOND QUALITY SEEDS are grown especially for us from selected strains, varieties that years of trial have proven to be most satisfactory for home and market gardens. Many of our seed crops are grown under our personal supervision—others come from the world's great centers of seed production of Europe and America where conditions are most favorable for their perfect development.

SPOKANE DIAMOND SEED QUALITY COMPANY

General Notes on Planting and Culture

WE have marked those varieties that **mature early** with this little Diamond, —our trade-mark. This will aid you in the selections for your home garden.

It you live in Northwestern Oregon or Washington you will have better success with your garden by planting these early maturing varieties after the Spring weather is settled and the ground warm, than if you planted very early, as many seeds will not give the best results in the cold damp of the early Spring, and even if they live, the plants may be stunted and not grow. These suggestions are only general, as you will note that many special sorts can be planted very early.

If you live in the Willamette Valley or Southern Oregon you can plant almost anything as early as the condition of the soil will permit.

Do not work the soil when it is wet, as this has a tendency to make it lump and bake and may put it in such shape that nothing can thrive in it. Wait until it is just dry enough to crumble away nicely when turned over, and if you will press the dirt firmly down on the seeds, getting right in the row and tramping the soil down with your feet — they will germinate quickly even in comparatively dry soil. Any extra work in carefully preparing the soil will more than repay you in the increased results, and always remember that constant and thorough cultivation is almost equal to water and fertilizer both, and will insure a good crop even in a dry season, and on ordinary soil.

New land must be thoroughly broken up and cultivated in order to kill out the wild nature, as new ground in the wooded sections of the Pacific Coast rarely produces bountiful crops the first few seasons without careful culture, fertilizing and rotation.

It pays to fertilize and cultivate to supply ready plant foods to the growing crops, as many years of accumulation of Fir and Pine needles will sour the ground, and until they rot and decay are detrimental to crop growth, but if properly worked and fertilized, good and profitable crops can be harvested from the beginning.

Plan your plantings and keep a garden book or record of some sort, for by so doing you will get the utmost pleasure and profit from your garden and as the seasons pass you will find this record an invaluable aid and reference work. For if you keep a record you will soon learn what varieties are best for your requirements and to know your favorites, and when buying seeds or plants you will know just what to order.

If you are in doubt about what you should do, or want any special information, be sure to write to us. We will be pleased to give your inquiries our careful attention, and advise you to the full extent of our knowledge.

BOOKS—**AN UP-TO-DATE REFERENCE BOOK** will save the beginner many times its cost and will suggest improved methods to the experienced. **SEE LIST OF STANDARD REFERENCE AND TEXT BOOKS.**

Diamond Quality Seeds

are Tested Seeds

TO further guard the interests of our customers and maintain our standard of excellence, our seeds are tested in a modern seed laboratory, equipped as recommended by the U. S. Dept. of Agriculture, in charge a certified seed analyst. It is here that final tests and inspections are made, and only those seeds that are above the standards are offered to the public, and bear our **Diamond Trade Mark**—the mark of quality that stamps them as the best obtainable.

You Can Protect Yourself

by planting "Diamond Quality" Seeds—
Tested for purity and germination—
They are above the standards of the pure seed laws.

REFERENCE TABLES

Quantity of Seeds to produce a given number of plants and to sow an acre

	Quantity per acre.
Artichoke, 1 oz. to 500 plants.	6 oz.
Artichokes—White French...	8 bu.
Asparagus, 1 oz. to 800 plants.	1 lb.
Asparagus Roots.....	7500
Barley.....	2 to 2 ½ bu.
Beans, dwarf, 1 lb. to 100 ft. of drill.....	1 bu.
Pole, 1 lb. to 100 hills.....	½ bu.
Beet, Garden, 1 oz. to 100 ft. drill.....	6 to 7 lbs.
Mangel, 1 oz. to 100 ft. of drill.....	5 lbs.
Broccoli, 1 oz. to 2,000 plants.	4 oz.
Brussel Sprouts, 1 oz. to 2000 plants.....	4 oz.
Broom Corn, in Drills.....	15 lbs.
Buckwheat.....	½ to 1 bu.
Cabbage, 1 oz. to 2,000 plants.	4 oz.
Carrot, ½ oz. to 100 ft. drill..	3 lbs.
Cauliflower, 1 oz. to 3,000 plants.....	3 to 4 oz.
Celery, 1 oz. to 5,000 plants..	4 oz.
Cheat.....	2 bu.
Chicory.....	4 lbs.
Clover, Alsike and White.	8 to 10 lbs.
Alfalfa.....	15 to 20 lbs.
Crimson Trefoil.....	10 to 15 lbs.
Red.....	10 to 15 lbs.
Collards, 1 oz. to 2,000 plants.	4 oz.
Corn, Pop (shelled).....	8 to 10 lbs.
Sweet or Field, hills..	12 to 15 lbs.
For soiling drills.....	3 bu.
Cress, ¼ oz. to 100 ft. drill...	1 lb.
Cucumber, 1 oz. to 100 hills.	2 to 3 lbs.
Egg Plant, 1 oz. to 2,000 plants.	4 oz.
Emmer.....	100 lbs.
Endive, ¼ oz. to 100 ft. drill.	4 lbs.
Flax, broadcast.....	¼ bu.
Grass—Kentucky Blue, for pasture.....	1 to 2 bu.
Kentucky Blue for lawns..	100 lbs.
Meadow Fescue.....	1 bu.
Mixed Lawn.....	5 to 6 bu.
Red Top, Chaff.....	1 to 2 bu.

	Quantity per acre.
Grass—Cont'd.	
Red Top, solid seed..	10 to 15 lbs.
Timothy.....	10 to 15 lbs.
Orchard, Perennial Rye.	1 to 2 bu.
Wood Meadow.....	1 bu.
Horseradish Roots..	15,000 to 25,000
Kale, 1 oz. to 2,000 plants....	4 oz.
Kaffir Corn, in drills....	6 to 10 lbs.
Kohl Rabi, 1 oz. to 2,000 plants	4 oz.
Leek, 1 oz. to 100 ft. of drill..	4 lbs.
Lettuce, 1 oz. to 150 ft. drill..	3 lbs.
Mushroom Spawn. 1 brick to 10 sq. ft.	
Millet—For Seed.....	20 lbs.
For Hay.....	30 lbs.
Melon, Musk, 2 oz. to 100 hills.....	2 to 3 lbs.
Water, 4 oz. to 100 hills.	3 to 4 lbs.
Oats.....	2 to 3 bu.
Okra, 1 oz. to 100 ft. of drill..	8 lbs.
Onion Seed, for sets....	60 to 85 lbs.
1 oz. to 150 ft. drill.....	3 to 4 lbs.
Onion Sets, 1 qt. to 40 ft. drill	8 bu.
Parsnips, 1 oz. to 150 ft. drill.	3 lbs.
Parsley, 1 oz. to 150 ft. drill.	3 lbs.
Peas, Field.....	2 bu.
Garden, 1 lb. to 100 ft. drill.....	1 to 2 bu.
Pepper, 1 oz. to 1,000 plants.	2 lbs.
Potatoes.....	10 bu.
Pumpkin, ½ lb. to 100 hills.	3 to 5 lbs.
Radish, 1 oz. to 100 ft. drill..	10 lbs.
Rape.....	3 to 5 lbs.
Rye.....	1½ to 2 bu.
Salsify, 1 oz. to 100 ft. drill	6 to 8 lbs.
Spinach, 1 oz. to 100 ft. drill.....	8 to 10 lbs.
Sugar Cane, in drills.....	10 lbs.
Sunflower.....	8 lbs.
Squash—Summer, 4 oz. to 100 hills.....	3 lbs.
Winter, 8 oz. to 100 hills...	4 lbs.
Tomato, 1 oz. to 2,000 plants.	4 oz.
Tobacco, 1 oz. to 4,000 plants.	3 oz.
Turnip, 1 oz. to 150 ft. drill.	2 to 3 lbs.

	Quantity per acre.
Vetches.....	1 ½ to 2 bu.
With grain.....	1 bu.
Wheat.....	1 ½ to 2 bu.

WEIGHTS OF VARIOUS ARTICLES

	Per bushel
Artichokes.....	60 lbs.
Barley.....	48 lbs.
Beans.....	60 lbs.
Buckwheat.....	48 lbs.
Blue Grass	
Kentucky.....	14 lbs.
English.....	24 lbs.
Canary Seed.....	60 lbs.
Cheat.....	34 lbs.
Clover Seed.....	60 lbs.
Corn, Shelled.....	56 lbs.
Charcoal.....	22 lbs.
Emmer.....	40 lbs.
Flax Seed.....	56 lbs.
Grass Seeds (unless otherwise stated)	14 lbs.
Hemp Seed.....	44 lbs.
Hungarian Millet..	48 lbs.
Lawn Grass.....	20 lbs.
Meadow Fescue...	24 lbs
Millet.....	50 lbs.
Oats.....	32 lbs.
Onion Sets.....	32 lbs.
Orchard Grass....	14 lbs.
Peach Pits.....	48 lbs.
Peas, Smooth.....	60 lbs.
Peas, Wrinkled....	56 lbs.
Perennial Rye.....	20 lbs.
Potatoes.....	60 lbs.
Rape.....	60 lbs.
Rye.....	56 lbs.
Red Top.....	14 lbs.
Red Top, Solid Seed.	42 lbs.
Timothy.....	45 lbs.
Vetches.....	70 lbs
Wheat.....	60 lbs.

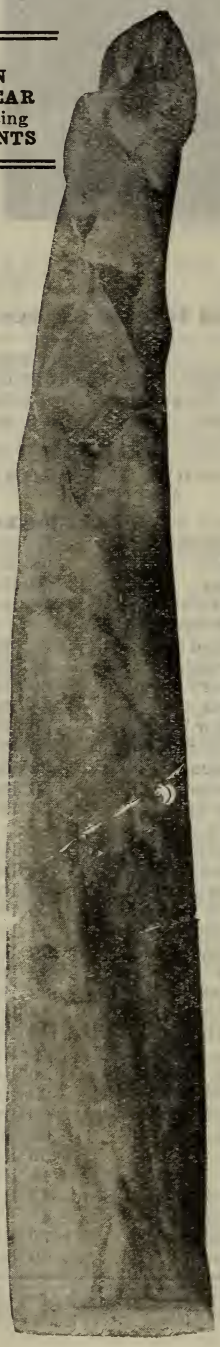
DIAMOND FERTILIZERS will restore and sustain the productiveness of your soil. They are an INVESTMENT, NOT an EXPENSE, and will RETURN MANY TIMES THEIR COST.

ASPARAGUS

Asparagus is one of the earliest Spring vegetables, and would be in universal use were it not for the mistaken idea that it is difficult to grow. In reality it can be produced very easily and cheaply and is a profitable market crop. A bed 15x50 feet, requiring about 100 plants, should give an abundant supply for the average family.

CULTURE.—*Soak the seeds 24 hours in warm water, and sow early in drills one foot apart. An ounce of seed will sow about 300 feet of drill. Keep the soil mellow and free from weeds. After one year's growth, transplant into permanent beds that have been carefully prepared by working to a depth of 24 inches, manuring deeply, using old manure and bone meal; 5 feet is a convenient width for a bed that will carry three rows, and can be reached without treading upon it. Set the plants about 18 inches apart in the rows and spread the roots out, firming the soil down on them. If your soil is well drained the bed may be level, but if not it must be elevated a little. Give a good dressing of well rotted manure after planting and an occasional application of salt or brine. In the Fall when the foliage turns yellow, cut it off and give a dressing of manure or good commercial fertilizer. A warm, sandy soil is the best, and one which has for some years been cultivated in garden crops and heavily manured is greatly preferred to a fresh soil. But at no period of its growth should the asparagus crop be allowed to lack for manuring. From one to two years' time can be saved by buying roots of us. See plant department. 7260 roots will plant an acre.*

You **GAIN A YEAR** by using **PLANTS**



Argenteuil

A popular French asparagus of great merit; larger and lighter in color and said to be superior to Palmetto; of vigorous, even growth; very early and free from disease. **Pkt., 5c; oz., 15c; ¼ lb., 35c; lb., $1.00**

Conover's Colossal

A large and rapid grower of excellent quality. Makes large uniform stalks of finest quality. This is the famous "Bouldin Island" Asparagus, a superior canning variety, color light green. **Pkt., 5c; oz., 10c; ¼ lb., 20c; lb., 65c**

Columbian Mammoth White

A newer, distinct and valuable variety. The stalks are white, of the largest size; very productive and early. **Pkt., 5c; oz., 10c; ¼ lb., 20c; lb., 65c**

Palmetto

The favorite green asparagus. Extra early and the uniformly large stalks remain tender longer than other varieties, being in prime condition for some days after coming above the ground. Palmetto is disease resistant, and a heavy, sure cropper. **Pkt., 5c; oz., 10c; ¼ lb., 20c; lb., 65c**

ASPARAGUS PLANTS—Four Best Varieties.

ONE-YEAR-OLD PLANTS—Postpaid, 25c dozen, 75c per 50, $1.00 per 100. By express or freight, 20c dozen, 50c per 50, 75c per 100, $6.00 per 1,000.

TWO-YEAR-OLD PLANTS—Postpaid, 40c per dozen, $1.00 per 50, $1.50 per 100. By express or freight, 25c per dozen, 75c per 50, $1.00 per 100, $8.00 per 1.000.

Artichoke — Large Green Globe

The variety used as a table vegetable. The edible portion is the thick end of leaf of the flower head. Sow early in drills and when about ten inches high transplant into rows four feet apart each way. It will produce only a small crop the first year, but will continue in good bearing five years. Cut before the bud opens. The seedlings are variable and for market gardening they are generally propagated from cuttings.

The buds when in blossom resemble huge thistles and the foliage being highly ornamental, this variety is much used for hedges and display in parkings. **Pkt., 5c; oz., 35c**

Globe Artichoke

Artichoke

Jerusalem.—White.

Distinct from the Globe, belongs to the Sunflower family. Produces tubers like potato; grown in the same way. A fine vegetable for table and also valuable as hog feed. **Price and description under Field Seeds.**

ASPARAGUS A good book on the culture of Asparagus **By HEXAMER.** 168 pages. **55c postpaid**

For BOOKS ON GARDENING see Book List

BEANS

We offer the following varieties as being best for our western condition as they have given the largest average yield and are most desirable and profitable for home or market gardens.

CULTURE.—*The soil best adapted for growing beans is a light, rich, well-drained loam, which was well manured for the previous crop. If the ground is too freshly manured the plants are apt to run to vines and set few blossoms. Plant in drills about two inches deep and from eighteen inches to two feet apart, as soon as the ground is dry enough and warm—about May 1st, or later, and for succession up to July 15th. Beans are very sensitive to cold and wet before they have sprouted, but are not so liable to be damaged after they are above ground.*

Plant about 1 lb. of Dwarf or Bush Beans to 100 ft. of drill, 1 bushel per acre. Pole Beans—1 lb. to 100 hills, requiring about ½ bushel per acre. When planted in hills, 2½ to 3 ft. apart, small varieties such as "Navy" and "Lady Washington" will require from 16 to 25 lbs. per acre; larger sorts running from 25 to 30 lbs. Owing to their short season of growth, from 60 to 80 days, beans generally make a profitable crop for trucking. After harvesting the beans, always plow the vines under to fertilize the soil.

For single lbs. by mail add 10c postage. Larger lots at parcel post rates.

Wax or Yellow Podded Kinds

DWARF OR BUSH VARIETIES

Pencil Pod Black Wax

"Pencil Pod" is the most satisfactory of the early dwarf Wax Beans. See Field Picture Page 6.

Of dwarf, bushy growth, about fifteen inches high, large, luxuriant foliage, beneath which in great clusters will be found an enormous crop of beautiful straight yellow pods six to seven inches long, well rounded, deeply "saddle backed," meaty and solid clear through; they are brittle, of rich mild flavor, and **entirely stringless.** An early sure cropper; of the finest quality.

Pkt., 10c; lb., 30c; 10 lbs., $2.50

Golden Wax

Very hardy and productive. A good second early variety of fine quality, but should be picked young to avoid strings.

Pkt., 10c; lb., 30c; 10 lbs., $2.50

Davis Wax

Rustless and immensely productive, very hardy and one of the best for market gardeners. The dried bean is kidney-shaped, clear white, and a favorite for baking and canning.

Pkt., 10c; lb., 30c; 10 lbs., $2.50

Wardwell's Kidney Wax

Vines are of medium size, with long, flat pods of a delicate, waxy yellow, very brittle and entirely stringless when young. A favorite main crop variety with market men.

Pkt., 10c; lb., 35c; 10 lbs., $3.00

Improved Black Wax

The standard early market variety, a sure cropper of good quality.

Pkt., 10c; lb., 25c; 10 lbs., $2.00

Oregon Pole Lima—Page 7

Napavine, Wash., April 26, 1915.

Gentlemen:

Those Oregon Pole Limas bought of you last year were all you claimed for them. Vines bore clusters of fine, large beans of the most delicious flavor. From a pound of seed raised all we could eat last year, besides saving enough seed to plant about 200 hills this year. Only had about 50 hills last year.

T. W. CRAGO.

"Pencil Pod" Black Wax

For Beans use 350 lbs. per Acre of DIAMOND VEGETABLE FERTILIZER. Ask for our Free Booklet "FERTILIZERS".

BEANS—Continued

Dwarf or Bush—Green Podded Kind

For single lbs. by mail add 10c postage. Larger lots at parcels post rates.

One of our Seed Fields of Beans—Pencil Pod Black Wax, listed on page 5

Owing to our mild Winters and cool Summers, locally grown acclimated seed from properly selected strains will be found to give best satisfaction in the Pacific Northwest. We are constantly testing and selecting the most dependable and profitable sorts and increasing our facilities and connections for local production, and when we offer a variety as being suited to your requirements and location you can accept it without fear of disappointment.

Stringless Green Pod
Extra Early

The finely shaped, long green pods are absolutely stringless, and are ready to market two weeks earlier than any other green-podded bean. It is of immense value, not only to the market gardener, but also for those who seek early beans of a rare quality for the home table. A splendid dried brown bean. **Pkt., 10c; lb., 30c; 10 lbs., $2.50**

Canadian Wonder

This splendid bush bean is the largest, most prolific of the green-podded sorts, and is entirely stringless in its early development. Comes a little later than the New Stringless Green Pod, but continues in bearing throughout the season, and is excellent shelled green.

Pkt., 10c; lb., 25c; 10 lbs., $2.00

Broad Windsor
"Horse Beans"

Stalk erect, strong and shrubby. The bean is large, broad and flat; should be planted early and is best green shelled. A European variety, very hardy and can be planted earlier than other sorts. Grown extensively for stock in some sections.

Pkt., 10c; lb., 15c; 10 lbs., $1.25

White Navy

Grown extensively for marketing dry shelled. The best known small white bean. Dwarf in growth and very productive.

Pkt., 10c; lb., 15c; 10 lbs., $1.25

Castor Bean
(For Ornamental Varieties see flower seed)

Used for medicinal purposes and by some claimed to keep moles away. Castor beans are very ornamental, the plants and foliage being large and tropical in appearance. **Pkt., 10c; lb., 25c**

Dwarf Horticultural
or "Cranberry Bean"

Grows erect, strong and shrubby, and is very prolific. The bean is highly prized, green shelled. It is rather large, plump and beautifully mottled yellow and red; one of the most delicious and desirable beans and a great favorite with market gardeners. The dwarf type of the old favorite London Horticultural Pole Bean.

Pkt., 10c; lb., 20c; 10 lbs., $1.50

Refugee, or Thousand to One

Of great value on account of its hardiness, vigorous growth and wonderful productiveness. Is not excelled by any other variety as a snap bean, and is considered the best for pickling or canning. Beans small, dark purple, veined brown. Pods of perfect form, dark green, veined purple.

Pkt., 10c; lb., 25c; 10 lbs., $2.00

Extra Early Red Valentine

This improved strain has a healthy, vigorous growth. The Beans are small, but the pods are thick, round and fleshy; very tender, rich and quite stringless. A popular bean for canning green. Bush grows to a height of fifteen inches and is very prolific. **Pkt., 10c; lb., 20c; 10 lbs., $2.50**

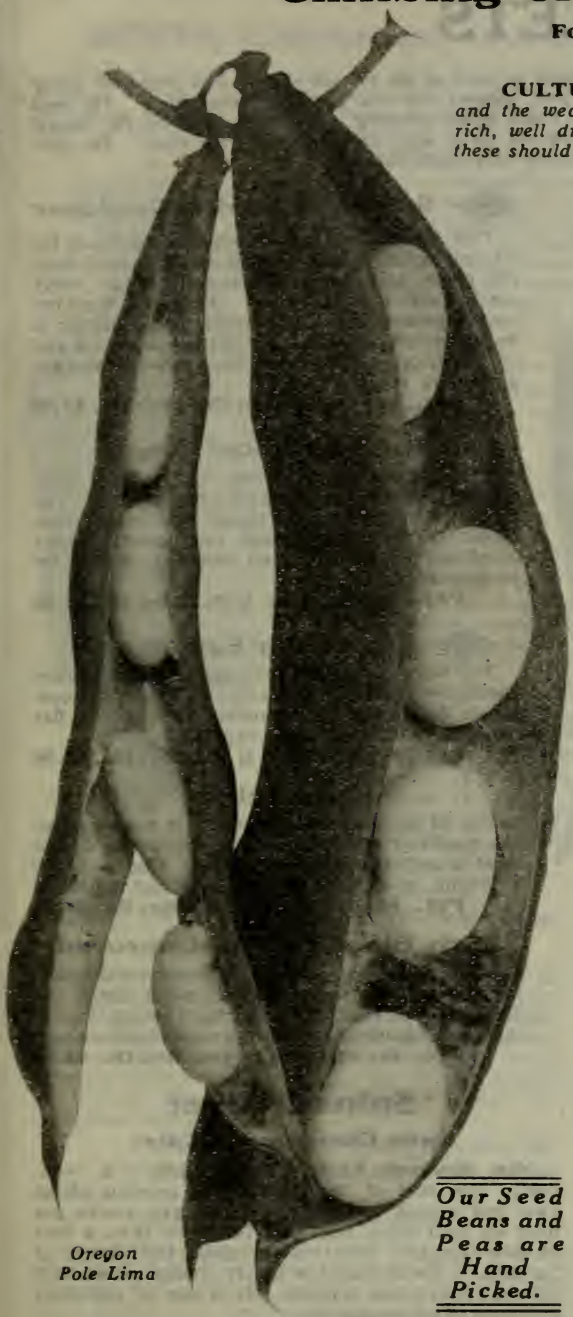
Lady Washington

Sturdy, bushy plant, erect habit, and is a great improvement over the old "Navy," being much earlier, a little larger, and a very heavy yielder; being especially adapted to our Western soils, and is entirely free from disease. Bush attains a height of about fourteen inches, and beans mature in September. **Pkt., 10c; lb., 15c; 10 lbs., $1.25**

Climbing or Pole Beans

For single lbs. by mail add 10c postage
Larger lots at parcel post rates

CULTURE.—*Do not plant until the soil has become warm and the weather settled—and always remember beans should have rich, well drained soil. It is best to set the poles before planting; these should be six to eight feet high, rows about four feet each way. Plant four to six beans to the hill and thin to two or three, depending on the variety. If trellis is used, sow in hills about one to two feet apart in the row. A pound should plant 75 to 100 hills. A top dressing of commercial fertilizer or old manure should be worked in when cultivating.*



Oregon Pole Lima

Our Seed Beans and Peas are Hand Picked.

Asparagus Bean

The True Asparagus Bean is superior to Kentucky Wonder in quality and fully equal in productiveness. The long, slender pods are very fleshy, almost round, crisp, tender and delicious, of a beautiful pale green color, attractive form and absolutely stringless. No bean equals them either for market or home use. They grow vigorously and bear heavily, the vines being literally covered with great clusters of shapely pods. Asparagus beans are profitable and heavy producers for market or garden, but owing to their fleshy pods are a difficult seed crop to produce and the demand has always exceeded the supply.

Pkt., 10c; lb., 35c; 10 lbs., $3.00

Kentucky Wonder

A vigorous climber; very prolific, bearing in clusters extremely long and very fleshy, succulent pods; flat, thick and remarkably tender. A first-class pole variety.

Pkt., 10c; lb., 25c; 10 lbs., $2.00

London Horticultural
The "Cranberry Pole" Bean

Very desirable for the family garden. Vines vigorous; pods green, streaked with red. Bean large, oval, cream colored, beautifully splashed with red. Has no superior, green, shelled or dry.

Pkt., 10c; lb., 20c; 10 lbs., $1.50

Lazy Wife

Pods are from four to five inches in length, produced in large clusters in great abundance. Dark green, thick, fleshy and stringless; of unusually rich flavor. Dry beans, pure white; excellent for winter use. **Pkt., 10c; lb., 25c; 10 lbs., $2.00**

Dutch Case Knife

Good corn hill bean; very early; pods long and flat; beans white; used green or dry.

Pkt., 10c; lb., 25c; 10 lbs., $2.00

Scarlet Runner

A favorite as a shell bean and for its flowers, which are bright scarlet; seeds broad and kidney shaped.

Pkt., 10c; lb., 30c; 10 lbs., $2.50

Oregon Pole Lima

The only Lima Bean that will thrive in our cool climate

Oregon Pole Lima grows a strong, thrifty vine and is very prolific, bearing continuously until frost, the blossoms bursting from the top shoots in long panicles, while the pods can be seen in every stage of development, to the matured beans at the bottom of the vine. Pods are well filled, having three to five large beans of the finest quality. Gather any time after full maturity.

Oregon Pole Lima can be planted in any garden soil as early as April or late as July. Give the same care and culture as other Beans, and they are ready to use when the pods are filled and first begin to ripen. It is not necessary that they should dry on the vines, except for seed.

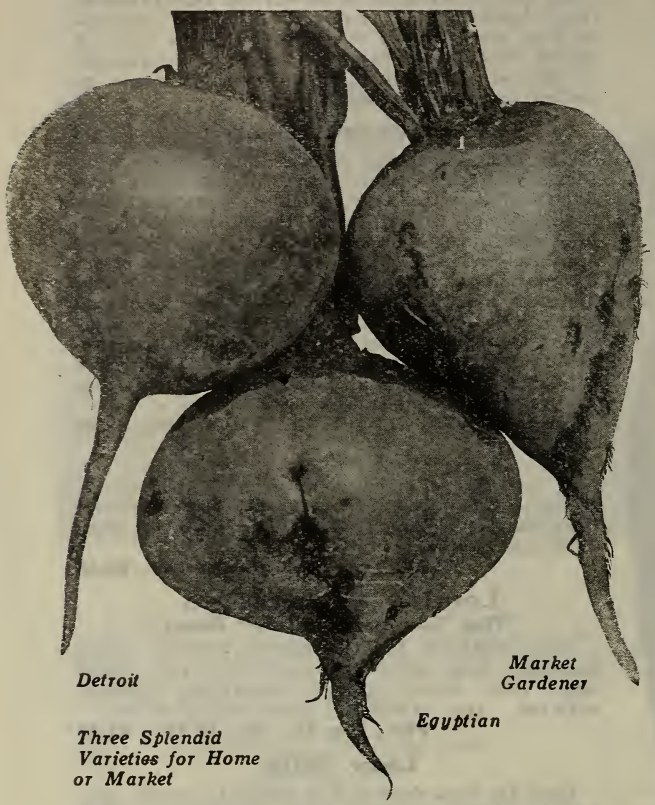
They are at their best when the full green pods begin to turn yellow.

Try "Oregon Pole Lima." It is a wonder, sure to grow, and will produce more fine beans of delicious table quality than any variety we know of.

Price per pkt., 15c; ½ lb., 25c; 1 lb., 40c; postpaid

BEETS

CULTURE.—*The Beet is hardy and may be planted as soon as the ground can be well prepared, doing best in rich, sandy soil, sown in rows sixteen inches apart, covered one and one-half inches deep. The seed will sprout better if soaked twenty-four hours in warm water before planting. Thin out by using the largest ones when they are of sufficient size, continuing until they are six or eight inches apart in the rows. For field crop, the rows should be far enough apart to permit the use of a horse cultivator.*



Detroit *Market Gardener* *Egyptian*

Three Splendid Varieties for Home or Market

Long Smooth Dark Blood

The leading late variety, keeping well all Winter. Should be planted in rich, warm soil to secure rapid growth, which makes them tender. Top small, root long and smooth. Flesh deep purple, fine and sweet.

Pkt., 5c; oz., 10c; ¼ lb., 30c; lb., 90c

Half Long Blood

A new variety of excellent quality. One of the very best for Winter use; does not become woody and keeps as well as the long Dark Blood. The root is smooth and handsome, and the flesh is brilliant in color and as good in quality as the best Blood Turnip varieties. Give it a trial.

Pkt., 5c; oz., 10c; ¼ lb., 30c; lb., 90c

S. S. Co.'s Market Gardener

This new, extra early Beet is remarkable for its fine quality and rapid growth; it is of deep red color and handsome shape; as an early market sort it is unrivaled. It is to a large extent superseding the Egyptian, being earlier in development, more attractive in appearance and of superior quality for the table. Market gardeners prefer it.

Pkt., 5c; oz., 15c; ¼ lb., 35c; lb., $1.00

Detroit Dark Red Turnip

A fine Beet for bunching for market; tops exceptionally small and uniformly upright. The roots are perfect turnip shape with small taproots. One of the deepest red beets. Quality is of the finest; sweet and tender, best beet for home gardens.

Pkt., 5c; oz., 10c; ¼ lb., 30c; lb., $1.00

Extra Early Egyptian

The best variety for forcing, and for market gardeners, being very early with small tops. Roots very dark red, rounded on top, but flat beneath, with very small tap roots.

Pkt., 5c; oz., 10c; ¼ lb., 30c; lb., $1.00

Early Eclipse

One of the best early sorts. It possesses all the qualities requisite in a first-class beet, and is of a uniform, globular shape. The roots are a bright, glossy red, fine-grained and delicious.

Pkt., 5c; oz., 10c; ¼ lb., 30c; lb., $1.00

Early Blood Turnip—Improved

An extra selected stock of blood turnip having larger, coarser tops and roots than the Detroit Dark Red, and requiring a longer time to mature. Excellent for Summer and Autumn use.

Pkt., 5c; oz., 10c; ¼ lb., 30c; lb., $1.00

Spinach Beet

Swiss Chard or Sea Kale

New Savoyed Leaf "LUCULLUS." A wonderful new sort of "Spinach-Beet," growing about two and a half feet high. The heavy stalks are over an inch thick and bare for more than a foot of their length. The leaves make the finest of "greens." Swiss chard is hardy, easily grown and should be in every garden. It is one of the most delicious of all vegetables.

Pkt., 5c; oz., 15c; ¼ lb., 40c

SUGAR BEETS

French White Sugar

The sort most generally grown as it combines, with heavy yield, a good percentage of sugar. It has produced 30 tons of beets to the acre, and contains from 10 to 13 per cent of sugar. The largest yields known have been obtained from this variety.

Pkt., 5c; oz., 10c; ¼ lb., 15c; lb., 50c

Lane's Imperial Sugar

This is an excellent variety and one of the best for stock feeding.

Pkt., 5c; oz., 10c; ¼ lb., 15c; lb., 50c

Klein Wanzleben

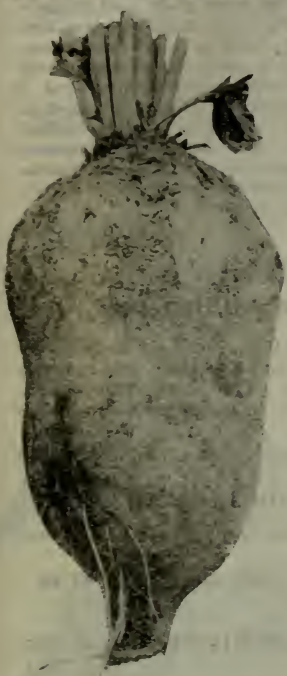
This is the variety which is considered best in Germany for producing sugar, and is now taking the lead in this country for this purpose. Our stock of seed is imported direct from one of the most careful German growers, and will give the best results.

Pkt., 5c; oz., 10c; ¼ lb., 15c; lb., 50c

Plant Sugar Beets for Dairy Cows and Pigs.

BEETS—Continued—MANGEL WURZEL

These are grown extensively for stock feeding, and afford large quantities of fresh, nutritious and wholesome food during the Winter months, in connection with grain and dried forage. Sugar Beets are richer and sweeter than Mangels, but do not produce as heavily.



Eckendorf

CULTURE OF MANGEL AND SUGAR BEETS. — *Thoroughly fine the soil as good roots cannot be grown in lumpy, poorly prepared ground. The largest crops come from a soil ranging from light to a friable clay loam that has received from eight to fifteen loads of manure to the acre. This can be plowed in or half broadcast and half used in the furrows; a deep plowing in of fresh manure in the Fall is best. It is also necessary to add some commercial fertilizer, but any good soil will grow a fair crop under ordinary culture.*

Use 6 to 10 pounds of seed to the acre, depending on whether machine or hand planting is used, planting liberally so that in thinning an even stand can be secured. The rows can be 18 to 30 inches apart, depending upon soil and method of culture. Level culture is best. If planted during dry weather, be sure the seed is in from one to one and one-half inches as it requires lots of moisture to burst the hard shell.

A poor stand and weak germination is often due to improper planting and lack of moisture. Transplanting can be successfully done to fill vacancies. Do this before a shower, and early, breaking off the tops of the larger leaves.

Like all root crops, they require clean culture. Thin early, giving two thinnings and leaving the plants 10 to 12 inches apart. The medium sized roots have the greatest food value.

Forty to sixty tons is a fair yield of Mangels. Sugar Beets, 10 to 13. Beets are easily spoiled even by light freezing and should be cut and stored to protect from frost, covering with a little soil to prevent evaporation.

Sludstrup

Yellow Giant, Intermediate, or Gate Post

Roots very large, growing over one-half out of the ground; flesh white, sweet and tender; tops bright green, comparatively small; neck small, short. We think perhaps this is the best of the yellow fleshed beets, because its fine flesh never becomes woody and its roots grow so well out of the ground that the crop is easily harvested. An enormous cropper.

Pkt., 5c; oz., 10c; ¼ lb., 15c; lb., 50c
Not postpaid, 5 lbs., $2.00; 10 lbs., $3.50

Mammoth Long Red

An improvement on the Long Red. It stands head and shoulders above all other varieties of Mangels; unequaled for yielding and feeding qualities. Grows to a very large size, and will yield 50 tons per acre with ordinary cultivation. If you want a large crop of large Mangels of good quality, don't fail to try this sort. Very uniform, smooth and of good shape. Should be grown in deep loose soil.

Pkt., 5c; oz., 10c; ¼ lb., 15c; lb., 50c
Not postpaid, 5 lbs., $2.00; 10 lbs., $3.50

New Mangel Half Sugar

A new variety, more valuable for feeding purposes than the old sorts, it being very much richer. In addition to this, the size and form have been improved until it yields as much per acre as the best Mangels, and twice as much per acre (bulk of roots) as the rich sugar beet. Roots large, very smooth, with few rootlets; creamy white in color, with medium sized tops.

Pkt., 5c; oz., 10c; ¼ lb., 20c; lb., 50c
Not postpaid, 5 lbs., $2.00; 10 lbs., $3.50

Danish Sludstrup

This new Mangel comes highly recommended Our seed is direct from the originator. We give his descriptions as follows: Long, reddish-yellow. grows well above the ground, and is easy to pull. Has repeatedly been awarded a first class certificate by the Danish Government and is doubtless the best Mangel in the world.

Pkt., 5c; oz., 10c; ¼ lb., 20c; lb., 55c
Not postpaid, 5 lbs., $2.00; 10 lbs., $3.75

Danish Red Giant Eckendorf

is of straight, cylindrical form, very blunt, and grows mostly above the surface. Awarded a first-class certificate as a very heavy cropper.

Pkt., 5c; oz., 10c; ¼ lb., 20c; lb., 55c
Not postpaid, 5 lbs., $2.00; 10 lbs., $3.75

Golden Tankard

Considered indispensable by many dairy farmers They state that they are able to obtain a higher price for milk when feeding cows on "Golden Tankard." Sheep thrive on it. "Golden Tankard" is of a rich, deep yellow throughout. Early, hardy and a heavy cropper; on account of its shape the roots can be left standing close in rows.

Pkt., 5c; oz., 10c; ¼ lb., 15c; lb., 50c
Not postpaid, 5 lbs., $2.00; 10 lbs., $3.50

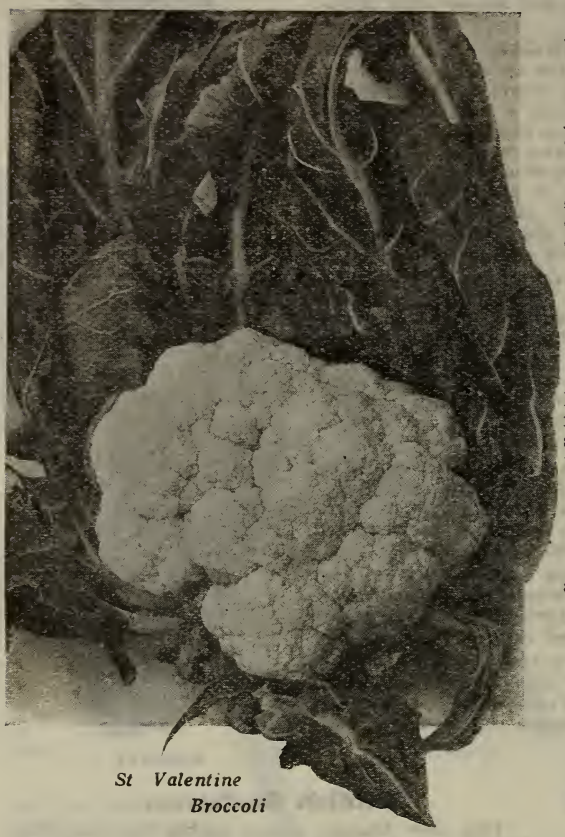
Improved Danish Intermediate—Taaroje—Best for Heavy Soils

Large, smooth, oval shaped mangel that grows high above the ground and is easily harvested. For very heavy soils this variety is preferable to the "Sludstrup." The food value is very high, the yield large. Special awards and first-class certificate by the Danish government.

Pkt., 5c; oz., 10c; ¼ lb., 20c; lb., 55c
Not postpaid, 5 lbs., $2.00; 10 lbs., $3.75

BROCCOLI

or Winter Cauliflower



St Valentine Broccoli

BROCCOLI is so nearly related to late Cauliflower that the varieties are often listed under both heads—the principle difference being in the hardiness and time of maturity Broccoli not heading until late Winter or early Spring. Culture is same as for late Cauliflower, and good, rich, well-drained bottom land is best, but well-tilled, well-fertilized upland will produce a good crop. The St. Valentine variety, which we introduced some years ago, has been extensively grown by commercial planters and a profitable industry established — many carloads being shipped from the vicinity of Portland each season.

St. Valentine

The Finest of All Broccoli

This grand new strain introduced by us is a sure header of immense size, finest quality, and is ready for market in February. The large, solid, handsome, white heads remain in good condition longer than other varieties.

Pkt., 10c; ¼ oz., 50c; oz., $1.25

Large White French

A valuable variety with large, white heads, firm and of good flavor.

Pkt., 5c; oz., 65c; ¼ lb., $1.50

"12 LBS. STRIPPED"

Fortuna, California, April 3, 1915

Gentlemen;

I have raised St. Valentine's Broccoli heads that weighed with all their leaves stripped off, 12 pounds by actual weight.

A. C. BUXTON

Brussels Sprouts

The plants, which are very hardy, grow two or three feet high, and produce, from the sides of the stalks numerous little sprouts, which resemble very small cabbages one or two inches in diameter. The leaves should be broken down in the Fall, to give the little heads more room to grow. They should be treated in all respects like Winter cabbage or kale.

Odense Market

An improved Danish variety, producing in greatest abundance firm, shapely sprouts, thickly set around the entire stalk; will stand a severe Winter, and is unsurpassed for market or home garden.

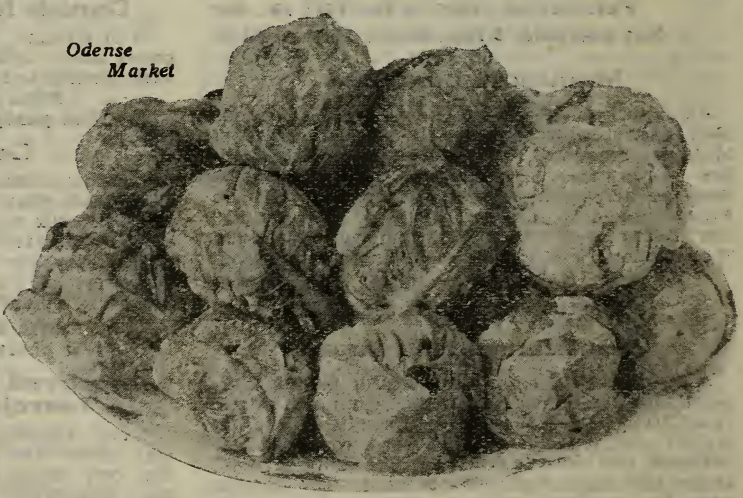
Pkt., 10c; oz., 25c; ¼ lb., 75c

Dwarf Improved

A carefully grown strain, very hardy and giving compact, round sprouts of large size and good quality.

Pkt., 5c; oz., 10c; ¼ lb., 35c

Odense Market



LOOK over our BOOK list. An up-to-date Garden Book may save you some money.

Vegetable Plants

Thrifty, well grown, true to name standard varieties in any quantity for seasonable delivery. See PLANT DEPT.

CAULIFLOWER

Plants in Season All Varieties

Mt. Hood Early Snowball

CULTURE.—*The Cauliflower succeeds well in any soil where cabbage will grow but best results are obtained in rich loam with an abundance of water. By sowing early varieties in a hot bed in February or March, or later in a cold frame, fine heads can be obtained quite early. For a later supply, sow seed in a prepared bed in May, choosing a cool, moist place. When large enough, transplant, making the rows about two and a half feet apart and eighteen inches between the plants. In dry seasons the crop must be watered.*

S. S. Co.'s "Mt. Hood" Early Snowball

The seed that produces those handsome large white solid heads that bring big profits to the gardener. We offer our "Mt. Hood" Cauliflower seed in sealed packets only, under our own label, it having been carefully selected and grown for us by one of the very few expert Cauliflower growers, and is the best strain of "Early Snowball" obtainable. We especially recommend "Mt. Hood" Snowball for either early or late planting.

Pkt., 25c; ½ oz., $1.50; oz., $2.50

Early Snowball

Ordinary strain. This is the regular grade of "Early Snowball" that is generally offered, and while it will not give as good results as "Mt. Hood," can be depended upon to produce a good crop.

Pkt., 5c; oz., $2.00; ¼ lb., $6.00

Autumn Giant

The heads are white, large, compact and thoroughly protected by foliage.

Pkt., 5c; oz., 75c; ¼ lb., $2.00

Danish Giant—Dry weather Cauliflower

"Danish Giant" is an early, large, solid white Cauliflower that can successfully withstand a drouth that would prove fatal to other varieties and will thrive splendidly in dry sections, being peculiarly adapted to their growing conditions, but like all cauliflower must have rich soil and cultivation to give best results. "Danish Giant" can also be grown under moist conditions and is a dependable market variety. If your location is subject to drouth or you are "dry farming," be sure to plant "Danish Giant."

Pkt., 20c; ¼ oz., 60c; oz., $2.00; ¼ lb., $6.50

Large Algiers

A valuable late sort, sure to head, of the best quality and very popular with market gardeners everywhere. Plants large, but of upright growth, the leaves protecting the heads so that they will endure, uninjured, a frost that would ruin other sorts. One of the very best of the late varieties.

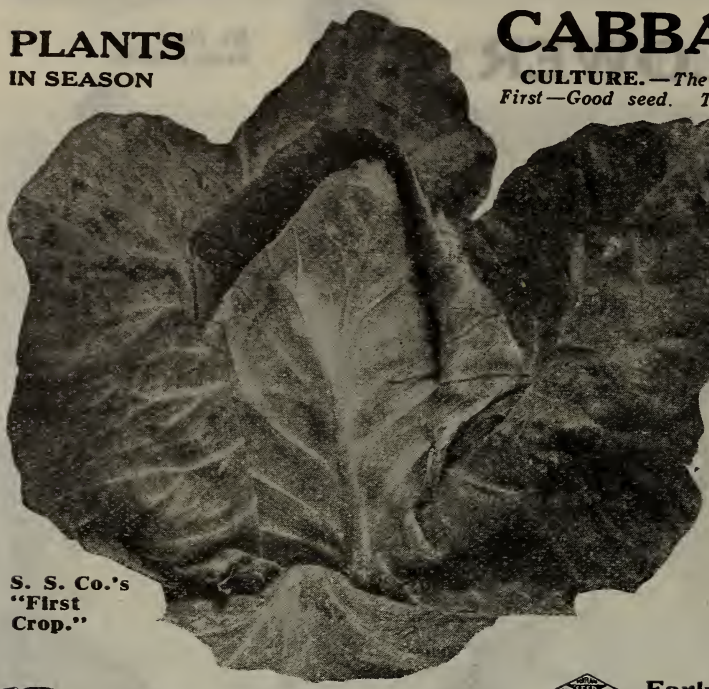
Pkt., 5c; oz., 75c; ¼ lb., $2.50

"CORONA DRY" **The Universal Insecticide Powder—For the control of garden pests**—Used on Cauliflower and Cabbage before heading. Saves them from Cutworms and Chewing Insects. Free Booklet, "Garden Pests."

DON'T BUY **cheap strains of Cauliflower Seed. Only the best select strains can be depended upon to produce a big percentage of large, white, solid heads.**

CABBAGE

PLANTS IN SEASON



S. S. Co.'s "First Crop."

CULTURE.—*The requisites for complete success are: First—Good seed. There is no other vegetable where the seed has so much influence on the quality of the product, and gardeners should always use the best procurable. Second—Rich, well prepared ground. Third—Frequent and thorough cultivation. A heavy, moist and rich loam is most suitable, which should be highly manured and worked deeply. Cabbage is universally grown and specific directions regarding the time and method of planting applicable to all localities cannot be given. In general, the early sorts should be sown very early in hot beds, hardened off by gradually exposing to outside air, and as early as the ground is in good condition, transplanted, setting 18 to 36 inches apart, according to size of variety. The late Autumn and Winter varieties may be sown from the middle to the last of Spring and transplanted when four to six inches high. Shade and water the late sowings in dry weather to get them up.*

☞ *It is important that the plants should not be crowded in the seed bed, or they will run up weak and slender and be likely to make long stems.*

S. S. Co. First Crop
The Ideal Early Cabbage

The earliest of all pointed varieties and an ideal sort for the private or market gardener.

First crop being ten days ahead of any other cabbage, takes but little room, and produces fine, solid heads. We advise all our customers to try this new variety for we believe it is a *sterling novelty of the greatest value.*

Pkt., 5c; oz., 25c; ¼ lb., 60c

Copenhagen Market
A Splendid Cabbage for Home Gardens

A new extra early globe-shaped Cabbage slightly flattened. The large solid heads are very uniform, with few outer leaves, keeps well and stands handling. **Copenhagen Market** originated in Denmark, where it is the favorite market variety, and we recommend it to our customers as the best early round head. Gardeners should give it a trial. Our stock is direct from the originator.

Pkt., 15c;oz., 35c

Early Jersey Wakefield

The favorite Early Cabbage with our market gardeners. A sure header. The thick, stout leaves and compact habit make it the best for Wintering over and very early setting.

Grown more extensively for market than any other early cabbage. Is always of good size, very solid, and has but few outside leaves; a reliable header and always gives good satisfaction.

Pkt., 5c; oz., 20c; ¼ lb., 50c; lb., $1.50

Early Dwarf Flat Dutch

Grows low on the stem; a sure header; firm, fine grained, tender and excellent.

Pkt., 5c; oz., 20c; ¼ lb., 50c; lb., $1.50

Succession

Heads large, slightly flattened; grows low on the stem.

Pkt., 5c; oz., 20c; ¼ lb., 50c; lb., $1.50

Early Winnigstadt

A desirable variety, having conical, solid heads; a sure header under almost any conditions, and keeps better than most early varieties. Fine appearance and of excellent quality.

Pkt., 5c; oz., 15c; ¼ lb., 50c; lb., $1.50

"BEATS EXPECTATIONS"

January 22, 1915.

Gentlemen:

Last Spring I got some fertilizer from you for Cabbage and the results were wonderful. It beat my expectations. My cabbage was all that I could ask for; it is all that you claim it to be and then some.

T. J. RAINEY.

January 1, 1915.

Gentlemen:

I bought some Drumhead Cabbage Seed from you and raised a head that weighed 32 pounds.

JOHN HOZIK.

Cabbage Plants

Well grown stocky plants, properly hardened off--all standard sorts in season. Prompt deliveries at right prices. SEE PLANT DEPARTMENT.

CABBAGE—Continued

Field of Shortstem Diamond Ball Head

Diamond Ball Head

An Improved Danish Ball Head, reselected for many years by our grower, who has been successful in securing a perfect late market sort of just the right size and finest quality. Heads are a little flatter than the older strain and stems shorter, color lighter green, but showing the characteristic reddish veins on the outer leaves. Solid, crisp, and of remarkable uniformity; market growers will get more perfect salable heads from **Diamond Ball Head** than from any other late cabbage. **Pkt., 10c; oz., 25c; ¼ lb., 75c; lb., $2.50**

Danish Round Head

A round ball shaped cabbage of great solidity. Color, rich dark green, has few outer leaves, is very hardy and is a profitable late market variety. **Pkt., 10c; oz., 25c; ¼ lb., 75c; lb., $2.50**

Charleston, or Large Wakefield

Large and a little later than the "Early Jersey Wakefield."

Pkt., 5c; oz., 20c; ¼ lb., 50c; lb., $1.50

Red Cabbage

Odense Market

Used for pickling. The heads are very fine and remarkably sure heading.

Pkt., 5c; oz., 20c; ¼ lb., 60c; lb., $2.00

Savoy Cabbage

Vertus—Late Savoy

Large, compact heads; crisp and tender with a rich flavor. Desirable for cooking or salads.

Pkt., 5c; oz., 20c; ¼ lb., 60c; lb., $2.00

Premium Late Flat Dutch

This is superior to any other late cabbage in cultivation, when large areas are planted for shipping. It possesses all the good qualities of the "Late Flat Dutch," and is a sure header.

Pkt., 5c; oz., 20c; ¼ lb., 50c; lb., $1.65

Danish Ball Head or Hollander

This is one of the hardiest cabbages in cultivation and endures both frost and drouth that would destroy other varieties.

Plants rather long-stemmed, but compact; leaves very smooth, but thick; head of medium size, round and very solid, being *the hardest heading cabbage we know of, and of the very best quality.* Matures quite late, keeps well, and is considered by many the best cabbage to hold over for Spring markets.

Pkt., 5c; oz., 20c; ¼ lb., 50c; lb., $1.75

Vertus

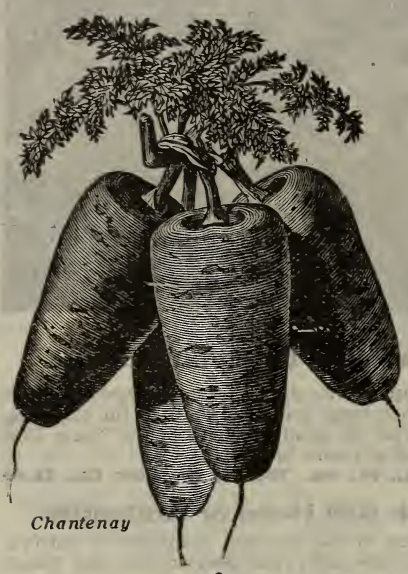
If you grow cabbage, kale, cauliflower, celery—you need a MASTER'S PLANTER

Price $4.50. Endorsed by the Washington State Experiment Station, Bulletin No. 6.

CARROTS

CARROTS, aside from being one of our most useful and easily grown garden vegetables, are invaluable for stock feeding. They are greatly relished, promote health and put a sleek coat on cattle and horses, giving a well-kept appearance. Dairy and stockmen should grow them extensively. For their special use we recommend our "Yellow Giant."

CULTURE.—*A sandy loam is the best soil for the carrot, but any good land, if thoroughly and deeply worked, will produce satisfactory crops. Sow as early in the Spring as the ground is fit to work, though good crops may be grown from sowing as late as June 15. For table use, sow the smaller kinds in rows 16 to 18 inches apart, and for field culture prepare the ground thoroughly and sow in drills 18 to 24 inches apart. Cover one-half to one inch deep and see to it that the soil is well firmed above the seed.*



Chantenay

Earliest Short Horn, or French

The earliest variety in cultivation, and best suited for forcing. Roots, reddish brown, globular and about two inches in diameter; should be used before full grown.

Pkt., 5c; oz., 15c; ¼ lb., 40c; lb., $1.25

Early Scarlet Horn

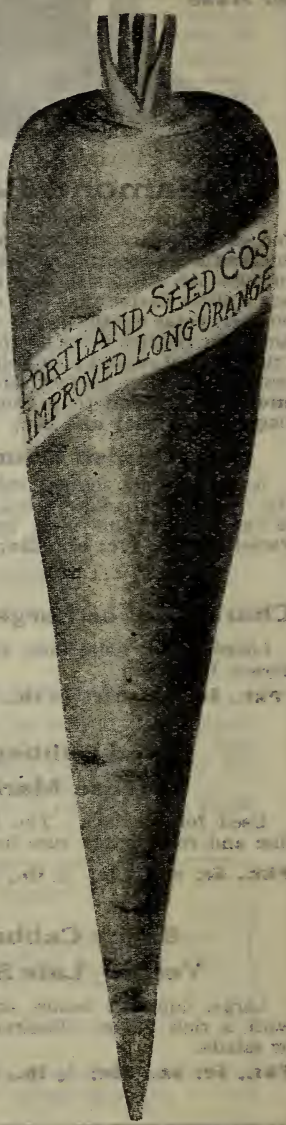
The best early kind for general use. It is larger than the forcing variety, but fully as good in quality, and produces a much larger crop.

Pkt., 5c; oz., 15c; ¼ lb., 35c; lb., $1.00

Oxheart

A thick carrot, five or six inches long and very blunt at the lower extremity. It grows very rapidly and the root attains a weight of more than a pound. It is tender and of good flavor.

Pkt., 5c; oz., 10c; ¼ lb., 30c; lb., 90c



Chantenay
The Market Gardener's Favorite

Tops, medium sized; necks, small; roots, tapering slightly, but uniformly stump-rooted and smooth; color, deep orange red; flesh, very crisp and tender. Although this is a medium early sort, it furnishes roots of usable size as early as any; is a heavy cropper, and is **undoubtedly one of the best for both the market and private garden,** while its great productiveness makes it very desirable as a field sort.

Pkt., 5c; oz., 10c; ¼ lb., 35c; lb., $1.00

Danver's Half Long

Grown largely on account of its productiveness and adaptability to all classes of soil. Tops, medium sized, coarsely divided. The smooth, handsome roots are of medium length, tapering uniformly to a blunt point; flesh, sweet, crisp, tender; deep orange in color. Although the roots of this variety are short, they produce as large bulk as the longer field sorts, and are more easily harvested. **Pkt., 5c; oz., 10c; ¼ lb., 30c; lb., 90c**

St. Valery

A popular French Carrot of a deep, rich orange red color, with very straight roots, broad at the top and tapering abruptly near the point. Average length 10 to 12 inches, foliage small. The table quality is excellent and the fact that it yields heavily in light soil makes it useful as a stock carrot. We consider it a valuable variety.

Pkt., 5c; oz., 10c; ¼ lb., 25c; lb., 75c

Portland Seed Co.'s Improved Long Orange

Popular for farm use on deep, mellow soil. Our stock is an improvement obtained by years of careful selection of the best formed and deepest colored roots, which grow to a large size, some specimens averaging twelve inches in length. Enormous crops can be grown under fair culture; one of the best varieties for feeding stock. **Pkt., 5c; oz., 10c; ¼ lb., 25c; lb., 80c**

USE DIAMOND VEGETABLE FERTILIZER FOR CARROTS

Our Book "FERTILIZERS" tells you how to profitably use Fertilizer. Tells you what you should get for your money when you buy Fertilizers—a book every grower should have and is FREE FOR THE ASKING.

CARROTS—Continued

Good and Productive Stock Carrots

Carrots are a sure and profitable crop for dairy and stockmen — and "Yellow Giant" is the most profitable, heaviest yielding variety— Try it.

"Kow Kure"
Makes poor cows good — good cows better
See Index.

Portland Seed Company's Yellow Giant

Specially Adapted to Moist, Heavy Soils

This new Carrot originated at the Sydney, Australia, Experimental Station, and has proved itself to be the **earliest and most productive stock carrot offered to date.** It is a half long variety, with an **immense broad shoulder.** The Carrot penetrates less than one-half the depth into the ground, which saves about one-half the expense of harvesting the crop. The color is of bright yellow, and is **perfection itself** for giving the proper color to butter. Every dairyman who wants a big crop of carrots of the right quality and easy of culture should plant our Yellow Giant.

Pkt., 5c; oz., 10c; ¼ lb., 30c; lb., 90c

Improved Short White—"Mastodon"

Of Excellent Table Quality

Ranks as a field carrot, owing to its enormous productiveness and the ease with which it can be harvested. Roots half long, smooth, very heavy at the shoulder, but tapering regularly at the point; color, light green at the crown, white below; flesh, rich, white, solid, crisp and of excellent flavor.

Pkt., 5c; oz., 10c; ¼ lb., 25c; lb., 80c

Large White Belgian

Extensively grown for stock feeding; very productive. Grows so much above the ground that the entire crop can be pulled by hand.

Pkt., 5c; oz., 10c; ¼ lb., 25c; lb., 80c

Yellow Belgian

Large root; yellow flesh; good keeper for late feeding. **Pkt., 5c; oz., 10c; ¼ lb., 25c; lb., 80c**

Chervil—Curled

This plant is used for flavoring soups and salads, and has a strong perfume.

Pkt., 5c; oz., 10c; ¼ lb., 30c

Cress

Curled, or Pepper Grass

This salad is much used with lettuce, to which its warm, pungent taste makes an agreeable addition. The seed should be sown in drills about 16 inches apart, on very rich ground, and the plants well cultivated. It may be planted very early.

Pkt., 5c; oz., 10c; ¼ lb., 20c; lb., 50c

True Water

One of the most delicious of small salads, and should be planted wherever a suitable place can be found. The seed should be sown and lightly covered in gravelly, mucky lands, along the borders of small, rapid streams. Under favorable conditions they increase very rapidly by self-sown seed and extension of the roots.

Pkt., 5c; oz., 35c; ¼ lb., $1.00.

Corn Salad

Fetticus, or Lamb's Lettuce

A refreshing salad, used extensively in Winter and Spring as a substitute for lettuce. It is often cooked like spinach. Sown in drills one foot apart, in the Spring or Fall. On the approach of cold weather cover over with straw or coarse litter.

Pkt., 5c; oz., 10c; ¼ lb., 20c; lb., 60c

Collards

True Georgia

Used as "Greens" mainly in the South and West. As the leaves are pulled off, others grow in their places. **Pkt., 5c; oz., 15c; ¼ lb., 30c**

Chives

See Vegetable Plant List. See Herbs. We supply all vegetable plants in season.

Chicory

Extensively used to adulterate coffee and as a substitute for it. The culture is the same as for carrots. Dig at about the same time as carrots, wash, slice and dry by artificial heat. The blanched leaves are used by some for salad.

LARGE ROOTED OR COFFEE.—The best kind.

Pkt., 5c; oz., 10c; ¼ lb., 25c; lb., 75c

CELERY

CULTURE.—*Sow the seeds early, about February, in a hot-bed or cold frame. When three inches high, transplant, setting them four inches apart. When grown six inches, and fine, stocky plants, set in richly manured, deep soil, in rows three and a half feet apart and about nine inches from plant to plant. Water if dry weather follows transplanting. During the next two months all the attention that is required is to keep down the weeds. Blanch by placing boards along the rows, or earth up a little, and continue doing so at intervals until only the tops of the leaves are visible late in Autumn. Never hoe up the earth when plants are wet. One ounce of seed produces about six thousand plants.* *SEE FOOTNOTE ON GROWING.*

White Plume

White Plume

The Leading White Celery

A handsome, crisp sort, of very easy cultivation. Naturally its stalks and portions of its inner leaves and heart are white, so that by closing the stalks either by tying or by simply drawing the soil up against the plant and pressing it together, the work of blanching is completed without the troublesome process of "banking" or "earthing up." It is the earliest celery known.

Pkt., 5c; oz., 20c; ¼ lb., 65c; lb., $2.00

Golden Yellow Self-Blanching

This is no doubt the best celery for early Spring market use. Plants are of a yellowish green color when young, but as they mature the inner stems and leaves turn a beautiful golden yellow, which adds much to their attractiveness and makes the work of blanching much easier.

Pkt., 10c; oz., 75c; ¼ lb., $2.50

Large White Solid

Of vigorous growth, white, crisp, tender; fine, nutty flavor.

Pkt., 5c; oz., 20c; ¼ lb., 60c; lb., $1.75

Golden Heart, or Golden Dwarf

Solid, of fine, nutty flavor; excellent.

Pkt., 5c; oz., 15c; ¼ lb., 50c; lb., $1.50

Winter Queen

This is without doubt the most valuable variety of celery for Winter and Spring use ever introduced. Has double the amount of heart of any known celery. The plant has a fine appearance, of compact growth, and blanches to a beautiful cream-white. Ribs perfectly solid, crisp and a delicious nutty flavor.

Stored for Winter or Spring use, it is an excellent keeper and when taken out the blanched stalks will be firm and crisp; entirely free from strings; brittle and of sweet flavor.

Pkt., 10c; oz., 35c; 2 ozs., 65c; ¼ lb., $1.00

Giant Pascal

Largest variety grown; of fine, nutty flavor; very easily blanched. **Pkt., 5c; oz., 15c; ¼ lb., 50c; lb., $1.50**

Celery Seed. For flavoring **Oz., 10c; ¼ lb., 20c; lb., 70c**

CELERY PLANTS

Large Healthy Transplanted Plants in Standard Varieties for Delivery in Season. Any Number at Right Prices. *See Plant Department*

CELERIAC

Turnip Rooted Celery

Large Smooth Prague

Improved form with very few side roots. The largest and best variety.

Pkt., 5c; oz., 20c; ¼ lb., 60c.

CELERIAC TURNIP ROOTED CELERY

To Succeed with Celery you must keep your plants growing constantly while young, if you allow them to "stand still" they will run up to seed later. Always cultivate as soon after watering as the *ground is dry enough to work well.* Fertilize heavily in the spring—and use nitrate later if needed.

DIAMOND FERTILIZERS FOR CELERY—
Read our Fertilizer Book. Mailed free on request

CUCUMBERS

CULTURE.—*Cucumbers need a warm, rich soil, and should not be planted in open ground until the weather is settled, as otherwise they will not thrive. Plant in hills four feet apart each way, thinning to three or four of the strongest plants, after danger from insects is passed. As fast as the cucumbers attain suitable size they should be taken from the vine, whether required for use or not, as their ripening soon destroys the vines' usefulness*

"Diamond" Long Green

The leading large variety. Fruit from ten to twelve inches long, dark green, crisp and tender A good variety for slicing, and when ripe they are the best for sweet pickles. We offer our "Diamond Strain"—they will grow long and uniform in shape. **Pkt., 5c; oz., 10c; ¼ lb., 30c; lb., 85c**

Peerless, or Early White Spine

One of the best sorts for table use, fruiting early and abundantly. Fruit uniformly straight and handsome; light green, with a few white spines.
Pkt., 5c; oz., 10c; ¼ lb., 30c; lb., 85c

Boston Pickling, or Green Prolific

Color, bright green, and a great producer. The fruits average four to five inches in length when large enough for slicing, and are of excellent quality, but it is for producing medium sized pickles that this variety is so highly esteemed.
Pkt., 5c; oz., 10c; ¼ lb., 30c; lb., 85c

Cumberland Pickling

The vines are hardy, strong, and fruit very freely. The straight young fruits possess the distinctly roughened surface so much desired for small pickles. The large fruits average nine to ten inches in length, two and a half inches in diameter, with full rounded ends, and are of good quality for slicing. **Pkt., 5c; oz., 10c; ¼ lb., 25c; lb., 75c**

Gherkin For Pickling

A very small, oval, prickly variety, quite distinct from all others. **Pkt., 5c; oz., 20c; ¼ lb., 60c**

Early Cluster

Fine, vigorous, producing the bulk of the crop near the root and in clusters. Fruit short, with uniformly thick end, dark green, but paler at blossom end. A very productive sort.
Pkt., 5c; oz., 10c; ¼ lb., 25c; lb., 75c

Short Green, or Early Frame

An excellent sort for both table use and pickling. Fruit straight, small at each end, bright green, with crisp, tender flesh. Comes into use a little later than the Early Cluster and keeps green a long time. **Pkt., 5c; oz., 10c; ¼ lb., 25c; lb., 75c**

Telegraph—Forcing

A standard forcing variety, very popular with gardeners. Fruit fourteen to sixteen inches long, of very fine quality. A sure and heavy cropper.
Pkt., 25c

Lemon Cucumber

This dainty little cucumber resembles a lemon both in form and color, having a distinctive flavor superior to and not found in any other cucumber. The Lemon Cucumber is so prolific that a single vine will be ample for the needs of the average family. It is also said that the Lemon Cucumber can be eaten without fear of the harmful results that some experience from eating cucumbers.
Pkt., 5c; oz., 25c; ¼ lb., 75c; lb., $2.00

Japanese Climbing

A useful variety for growing on a trellis or wire. The cucumbers are long, of a dark green color, white flesh, crisp, and of a good flavor. **Pkt., 10c; oz., 15c; ¼ lb., 50c**

Peerless Early White Spine

USE A "McWHORTER" FERTILIZER DRILL
See Index

"The Davis Perfect" Cucumber

The **"Davis Perfect"** is of perfect form, large size and of the finest color; is crisp, delicious and almost seedless.

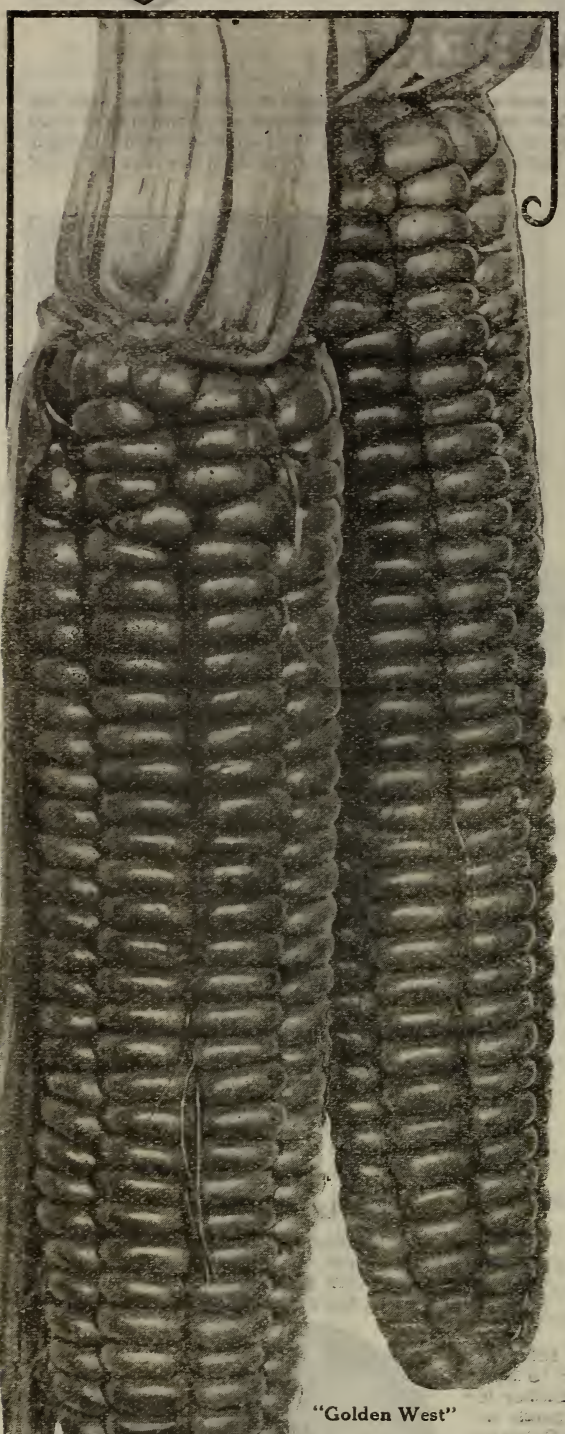
The **"Davis Perfect"** is as handsome, grown outside, as any hothouse cucumber.
Pkt., 10c; oz., 15c; ¼ lb., 35c; lb., $1.00

Early Russian

Earliest and hardiest. Very vigorous and productive. Fruit three to four inches long, thick, oval, pointed at each end, and covered with fine, small spines. **Pkt., 5c; oz., 10c; ¼ lb., 25c; lb., 75c**

Lemon Cucumber

☛ *For Cucumbers "DIAMOND FRUIT FERTILIZER" will repay its cost many times over. Let us send you our FREE BOOK "FERTILIZERS"*



"Golden West"

Sweet or Sugar Corn

For single lbs., by mail, add 10c postage; large lots at parcel post rates

CULTURE.—*Corn should not be planted until the ground is warm, as the seed will rot in cold, damp soil, or if planted too deep. Late April is early enough for first plantings and for succession plant every two weeks through May and June. Cover the first planting very lightly, increasing the depth a little for the later plantings. For the Dwarf Early varieties, rows should be three feet apart; for later large varieties, four feet, and the hills two to three feet in the rows.*

Sweet or Sugar varieties are used both for table and stock feeding, some of the large later sorts being preferred for silos and fodder.

Golden West—Oregon Grown Seed

The richest, sweetest corn ever grown—To be sure of the right strain, look for our Diamond trade mark on every package.

Our "Golden West" Corn, a selection from the original strain of Golden Bantam, produces a larger ear, has a more vigorous growth, and by continued careful selection, improves yearly. We believe it to be the richest, sweetest, best yielding early sweet corn, nothing having ever been produced that will compare with it in any way. "Golden West" is extremely hardy, can be planted earlier than other varieties, and, being of dwarf habit, can be planted closer than other sorts. It is the very best corn for market or home gardens, where earliness and quality are considered. The color is a rich, creamy yellow, deepening to golden as it matures, and the quality is so fine that you must try it to appreciate how good corn can be.

Pkt., 10c; lb., 20c; 10 lbs., $1.50

Golden Bantam

The original yellow sweet corn. Does not grow quite as large an ear as our "Golden West," but has most of its good qualities, being early, productive, sweet and rich.

Pkt., 10c; lb., 15c; 10 lbs., $1.25

Oregon Evergreen

We offer "Oregon Evergreen" as the finest main crop Sweet Corn. The flavor and sweetness have not been excelled and the extreme whiteness of the large ears makes it very beautiful and valuable for canning. It is large and the stalks produce more ears than any other variety and have a very heavy husk over the grains, protecting them from insects and keeping the ear fresh a long time after cutting.

"Oregon Evergreen" is a hardy, vigorous grower and is the ideal Corn for market gardeners.

Pkt., 10c; lb., 20c; 10 lbs., $1.50

Livingston's Early Sugar

A grand "dry weather" corn that will stand severe drouth—the stalks remaining green and ears filling well even in the driest years. In favorable seasons it will produce ears fit for table in 60 days from planting. Ears averaging 7 inches long contain from 12 to 14 rows of deliciously sweet, pure white kernels on white cob. **Pkt., 10c; lb., 25c**

Early Minnesota—Oregon Grown

This old and deservedly popular variety is one of the best early sorts for the market and the private garden.

Oregon Grown Seed, **Pkt., 10c; lb., 20c; 10 lbs., $1.35**
Northern Grown, **Pkt., 10c; lb., 15c; 10 lbs., $1.00**

Stowell's Evergreen

Remarkable for remaining a long time in a fresh condition suitable for the table. Hardy and productive, and the best late variety for general use.

Pkt., 10c; lb., 15c; 10 lbs., $1.00

Remember THE RICH FLAVOR AND SWEETNESS OF CORN DISAPPEAR QUICKLY AFTER GATHERING AND TO BE AT ITS BEST SHOULD BE USED AT ONCE.

SUGAR CORN—Continued

Peep O'Day

Earlier Than Any Other—Sweet, Early, Productive.—

For flavor, sweetness and productiveness it is ahead of any other early white sweet corn. Useful as a first early variety, being small can be planted close. A valuable addition to our list for our short Western Summers.

Pkt., 10c; lb., 15c; 10 lbs., $1.00

Early White Cory
MAMMOTH

The stalks are no larger than those of the "White Cob Cory," but each stalk furnishes two or more large, fine-shaped ears, which are fit for use before those of most other sorts. The ears are 12-rowed, very symmetrical and handsome. The grain is large, broad, very white and of remarkably good quality. **Pkt., 10c; lb., 15c; 10 lbs., $1.00**

Well-Known and Standard Varieties

All varieties 10c per packet, postpaid.—For single pounds by mail add 10c. For larger lots add parcel post rates.

	Per lb.	Per 10 lbs.
ADAMS' EXTRA EARLY.—Not sugar corn; small ears for early use	**10c**	**$0.90**
BLACK MEXICAN.—Black grains, sweet and delicious; fine for home use	**15c**	**1.00**

Black Beauty

EGG PLANT

Should be started in a hotbed and transplanted when the weather is settled and the ground thoroughly warm. They will thrive with the same treatment as that given the tomato.

Black Beauty

An extra early, quick-growing, vigorous variety, handsome and very uniform. Color, deep blackish purple. Splendid market sort.

Pkt., 10c; oz., 50c; ¼ lb., $1.50; lb., $6.00

New York Improved, Large Purple

The leading market variety. Large, round, dark, excellent and the most productive. **Pkt., 5c; oz., 30c; ¼ lb., $1.00**

GARLIC

CULTURE—*Garlic is a profitable crop if your soil is right and proper methods of culture are employed. The sets are planted in the same manner as "Multiplier Onions," dividing the little clump, planting each bulblet thick end down, being careful not to bruise them as they will rot if injured. October is the planting month in Western Oregon.*

A medium loam soil containing a little sand and well-drained is best and commercial fertilizer should be used. Deep and thorough preparation of the soil is necessary.

Plant in rows 14 inches apart—sets 4 inches apart in the row. It requires 175 to 200 lbs. to plant an acre. When approaching maturity, the tops die down and are not removed but used to braid the Garlic together for hanging up and convenience in handling. An acre should produce from two to four tons.

Price per lb., 20c; postpaid, 30c.
Write for quotation on large lots.

ENDIVE

This is a hardy vegetable, cultivated principally for a Winter salad. Sow from May until August for a succession of crops; tie the leaves closely together to blanch them.

Broad Leaved Batavian (Escarolle)

Has broad, thick leaves, which form a large loose head. **Pkt., 5c; oz., 10c; ¼ lb., 30c**

White Curled

A beautiful variety, with curled, mossy leaves, for early use. **Pkt., 5c; oz., 10c; ¼ lb., 30c**

Green Curled

Standard sort for Fall and Winter.

Pkt., 5c; oz., 10c; ¼ lb., 30c

Horse Radish Roots

For prices and description, see Plant Department

Kohl Rabi

Hardy and of easy culture. Grown from plants the same as cabbage. The Kohl Rabi is a vegetable intermediate between the cabbage and turnip and combines the flavor of both. The edible part is a turnip-shaped bulb formed by the swelling of the stem. Kohl Rabi is far superior to cabbage or turnips in the delicacy of its flavor, and is a splendid addition to every garden. It should be eaten before growth ceases.

Early White Vienna

Very early; bulb white; best table variety.

Pkt., 5c; oz., 20c; ¼ lb., 65c

Early Purple Vienna

Same as above, except in color, which is purple.

Pkt., 5c; oz., 20c; ¼ lb., 65c

Herb Seeds—Sweet, Pot and Medicinal

Every garden should contain a collection of Herbs for flavoring and medicinal purposes. They are almost a household necessity; are easily grown, and many of them are very ornamental.

CULTURE.—*Herbs in general delight in rich, mellow soil. Those marked with an (*) are perennial, and when once obtained in the garden may, with a little attention, be preserved for years. Sow the seeds early in the Spring in shallow drills, one foot apart. We offer some of the most useful and popular. They should be cut on a dry day, just before they come into full bloom, and tied in bunches and hung up or spread thinly on a floor where they can dry quickly. When dry and crisp, rub fine and bottle.*

All the following Herbs, 5c per Packet. Except where noted.

	Oz.	¼ lb.
ANISE.—Seeds have useful medicinal properties; also used for flavoring	10c	$0.25
***BALM.**—Used for culinary purposes and for making Balm Tea	25c	.65
BASIL.—Used for seasoning soups, having a decided flavor of cloves	15c	.45
BORAGE.—Excellent for bees, flowers are also in request for garnishing	15c	.40
***CHIVE.**—Has mild onion flavor; grows in grass-like clumps; much used for flavoring. **Pkt., 10c**	50c	
CORIANDER.—Seeds used in confections; leaves for soups and salads. Very aromatic	15c	.25
CARAWAY.—For flavoring, the seeds being used extensively by bakers and confectioners	10c	.25
***CATNIP.**—(Cat Mint.) **Pkt., 10c**	40c	1.00
DILL.—The flower heads and seeds are used in soups, stews and pickles; leaves have same flavor and can be used in like manner	10c	.25
***FENNEL.**—For garnishing and fish sauce	10c	.25
FENUGREEK.—For flavoring	10c	
HYSSOP.—Used medicinally	25c	.75
***HOREHOUND.** — Used medicinally as a cure for colds	20c	
***LAVENDER.** — By distillation produces the well-known Lavender water, the flowers for perfuming wardrobes, etc.	25c	$0.75
MARJORAM.— —The Sweet aromatic leaves in either a green or dry state are used for flavoring	20c	.60
***PENNYROYAL.**—Used medicinally **Pkt., 10c**		
***PEPPERMINT.**—For flavoring. **Pkt.,**	10c	
***ROSEMARY.**—Infusions of the leaves are used in medicinal beverages. Produces an aromatic oil	35c	
***RUE.**—Leaves are used in medicine, also for croup in poultry	30c	.75
***SAGE.**—The leaves and tender tops are used in stuffings and sauce; also in the beverage known as Sage Tea	15c	.50
SAFFRON.—Used for flavoring	15c	
SAVORY.—Summer—Used for flavoring	25c	
SAVORY.—Winter	25c	
THYME.—Broad leaved, used in soup, stuffing and sauce. **Pkt., 10c**	45c	1.25
***WORMWOOD.**—Taken as a tonic in the form of tea	25c	
TANSY.—Used medicinally, as tea and bitters. **Pkt., 10c**	35c	

HERB SEEDS FOR FLAVORING

Anise

Anise seed for flavoring. **¼ lb., 15c; lb., 40c**

Coriander

Coriander seed for flavoring.
¼ lb., 10c; lb., 30c; 100 lbs., market price

Poppy

Seed used for flavoring. **¼lb., 15c; lb., 45c**

Mustard

For flavoring and pickling.
Lb., 20c; postpald, 30c; 100 lbs., market price

Caraway

We keep constantly on hand a large stock of well preserved seed for the use of Druggists, Bakers and Confectioners.
¼ lb., 10c; lb., 35c; 100 lbs., market price

Dill

Used to flavor soups, stews and pickles. The leaves possess similar qualities, and can be used in the same manner as the seeds. **¼ lb., 20c; lb., 45c**

Celery

For flavoring. **Oz., 10c; ¼ lb., 15c; lb., 50c**

FOREIGN NAMES OF HERBS

A Stands for Annuals or those generally used for such. B For Biennials. P For Perennials.

	ENGLISH	FRENCH	GERMAN	ITALIAN
A	Anise	Anis	Anis	Anacio
P	Balm	Melisse-Citronelle	Citronen-Melisse	Melissa
A	Basil	Basilic-grand	Basilikum	Basilice
A	Borage	Bourrache	Boretsch	Boragine
A	Caraway	Cumin des pres	Feld-kümmel	Carvi
P	Catnip	Cataire	Katzenmunze	Cataria
A	Coriander	Coriandre	Koriander	Coriandorio
A-B	Dill	Aneth	Dill	Aneto
P	Fennel, Sweet	Fenouil	Fenchel	Finocchio
A	Fenugreek	Fenugrec	Bockshornsamen	Foenungrasciene
P	Horehound	Marrube Blanc	Andorn Kraut	Marrubio
P	Hyssop	Hysoppe	Isop	Issopo
P	Lavender	Lavende	Lavendel	Lavanda
A-B-P	Marjoram, Sweet	Marjolaine	Majoran	Maggiorana
P	Mint, Common	Menthe des Jardins	Münze	Menta
P	Rosemary	Romarin	Rosmarin	Rosmarino
A	Rue	Rue	Raute	Ruda
P	Sage	Sauge	Salbei	Salvia
A	Saffron	Safran	Safran	Zafferano
P	Sorrel	Oseille	Sauerampfer	Acetosa
A	Savory, Summer	Sarriette	Bohnenkraut	Santoregia
P	Tansy	Tanaisie	Gemeiner Rainforn	Atanasia
P	Thyme	Thym	Thimian	Timo
P	Wormwood	Absinthe	Wermuth	Assenzio

We Supply Herb Plants in Most Varieties in Season. See Plant Dept.

KALE

Emerald Isle

Finest Kale in the World

This is really the handsomest Kale that has ever come under our notice; and is entirely distinct from other strains, very hardy, of medium height, and very vigorous, throwing out new shoots as fast as the leaves are used, and will furnish excellent greens all winter. The closely curled, handsome leaves are most attractive and of fine flavor. A fine exhibition plant. We offer Oregon grown seed.

Pkt., 10c; oz., 15c; ¼ lb., 30c

Tall Green Curled Scotch

Grows about two feet high; leaves dark green, curled and wrinkled; very hardy and is improved by a slight frost.

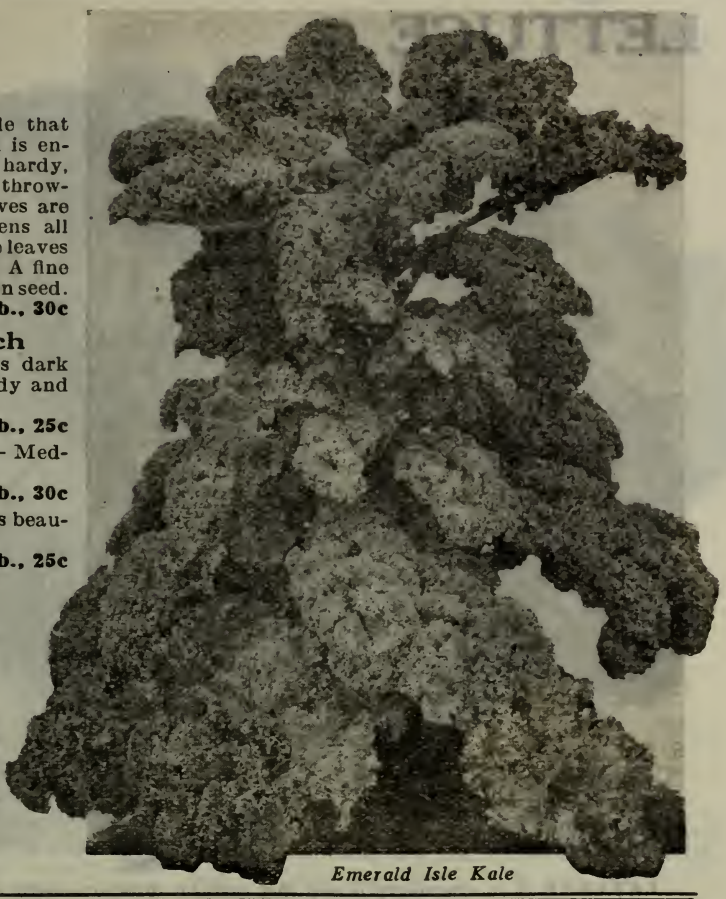
Pkt., 5c; oz., 10c; ¼ lb., 25c

HALF DWARF MOSS CURLED. — Medium sized leaves, nicely curled.

Pkt., 5c; oz., 10c; ¼ lb., 30c

DWARF GREEN CURLED.—Leaves beautifully curled and bright green.

Pkt., 5c; oz., 10c; ¼ lb., 25c



Emerald Isle Kale

LEEK

The Leek belongs to the Onion family. Prized for soups. Cultivation similar to that of Onions, but should be hilled up about the neck to blanch it.

Large Rouen, or American Flag

A large, favorite American sort.

Pkt., 5c; oz., 15c; ¼ lb., 40c; lb., $1.25

Chinese Mustard

MUSTARD

Mustard is used alone as "greens," or with cress as salad. Sow any time in the Spring, in rows, and thin out as necessary.

SOUTHERN GIANT CURLED.—We offer a fine strain of the true curled leaf. **Pkt., 5c; oz., 10c; ¼ lb., 15c; lb., 50c**

WHITE ENGLISH.—Leaves mild, tender when young; seeds yellow. **Pkt., 5c; oz., 10c; ¼ lb., 15c; lb., 40c**

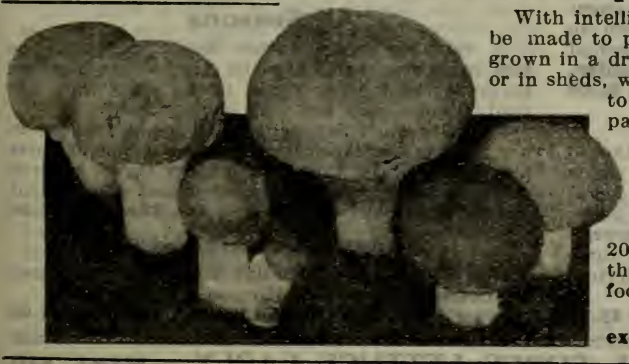
FORDHOOK CURLED.—Beautiful dark green, finely curled plume-like leaves that are of distinctive flavor; superior to spinach as greens and is fine for salads. "Fordhook Curled" is vigorous and productive.

Pkt., 5c; oz., 10c; ¼ lb., 30c; lb., 90c

CHINESE MUSTARD.—Less pungent than other varieties. Chinese Mustard is most delicious, thriving at the same season and under conditions that are favorable to spinach. A splendid addition to our gardens.

Pkt., 5c; oz., 10c; ¼ lb., 15c; lb., 45c.

Mushroom Spawn



With intelligent care and good spawn, Mushrooms can be made to pay handsomely. They can be successfully grown in a dry cellar, under the benches of a greenhouse, or in sheds, where the temperature can be kept from 50 to 60 degrees through the Winter. Our free pamphlet gives general instruction.

Lambert's Pure Culture

A new kind of spawn, without a doubt the best; much superior to the common English. It comes in bricks, weighing about 20 ounces. These are broken up into pieces the size of a walnut and put into the bed one foot apart each way. A brick will plant 10 sq. ft.

Price, per brick, 25c; postpaid, 40c; by express, not prepaid, 5 bricks, $1.00

MUSHROOMS. How to Grow Them. By Falconer. 162 pages. Postpaid $1.10
MUSHROOM CULTURE and Pure Culture Spawn. 32 pages. Postpaid 35c

LETTUCE

S. S. Co.'s "Crispette" a splendid lettuce at all seasons for Home Gardens

LETTUCE *is so extensively grown that cultural directions seem unnecessary, but we offer a few simple suggestions that may save a later disappointment, as any failure is generally blamed to the seed. This should not be, as Lettuce, like many other vegetables, requires very rich soil, plenty of water, a cool growing season and intense culture to produce the best results. If the earliest varieties are planted out in the Spring, and the weather turns dry and hot, they will run up to seed without heading. The same seed sown in the Fall or with cooler growing weather would develop perfectly. At a temperature of* 40 *degrees or lower lettuce will not thrive. At* 65 *degrees and upward it has a tendency to run up and not head properly. For outside planting sow the seed in shallow drills from one to two ounces to the* 100 *yards. An ounce will produce* 3,000 *plants. Four pounds should plant an acre. Lettuce matures in forty to sixty days from time of planting.*

Spokane Seed Company's Crispette

Our "New Crispette" is a beautiful lettuce, the quality of which is simply perfect. The large, curly leaves, which cover the outside of the solid heads, are of a bright, light green. The unusual solidity of the heads is insured by the large, white main ribs of the leaves, each of which curving strongly toward the center, makes it impossible for the leaves to open outward and expose the center, which will always be found crisp, tender, sweet and melting. It matters not whether grown to head in the early Spring or the hottest days of Summer, the leaves are always **crisp and tender.**

Pkt., 5c; oz., 15c; ¼ lb., 30c; lb., $1.00

May King

A large growing, smooth leaved, richly flavored sort. Plant, light green, with round leaves, which form into a very solid, compact, round head; stands a long time without running to seed. Inner leaves blanch to a rich, golden yellow. **Exceedingly rich, tender and buttery.** Fine for open ground or forcing. For succession plant in Spring, then in August and again in September.

Pkt., 5c; oz., 15c; ¼ lb., 35c lb., $1.25

Grand Rapids—For Early Forcing

As a Lettuce for greenhouse forcing, this variety undoubtedly stands at the head of the list. Of quick growth, and stands for some days after being fit to cut. The plant is upright, and forms a loose head or cluster of large, light yellowish green leaves, slightly crimped and blistered, rather thin, good flavor, crisp and tender. It will stand shipping better than most curled sorts.

Pkt., 5c; oz., 15c; ¼ lb., 35c; lb., $1.25

All Seasons

A valuable new "Butter Head" Lettuce; the best main crop variety, as its large heads continue to grow for two or three weeks after they are ready to use, and are very slow to seed.

"All Seasons" is headed up ready for use in less than ten weeks from planting. Color of outer leaves is a bright green, with inner leaves blanced a rich golden yellow; very crisp and of excellent flavor. **Pkt., 5c; oz., 15c; ¼ lb., 35c; lb., $1.00**

Large Drumhead

One of the largest heading kinds, but the heads are not so solid as the "Hanson" or "Deacon."

Pkt., 5c; oz., 15c; ¼ lb., 30c; lb., $1.00

DIAMOND FERTILIZERS WILL FORCE LETTUCE EARLY — MAKE BIG SOLID HEADS — TELL US whether you are growing under glass or outside and we can tell you what fertilizer is best, and how to use it profitably — FERTILIZER BOOK FREE—ASK FOR IT.

LETTUCE

LETTUCE—Continued

New York or Wonderful

The Best Head Lettuce for Market Growers

This is the mammoth head lettuce so popular in California, from whence it is shipped to the Northern markets, arriving in splendid condition. The immense heads are solid, heavy, beautifully blanched to a creamy white with bright green outer leaves. The quality is unsurpassed, being tender, crisp and sweet. "New York" is a hardy, rapid grower, deep rooted and resistant to drought; a slow seeder and sure to head.

Pkt., 5c; oz., 15c; ¼ lb., 50c; lb., $1.50

Deacon

Heads very solid and of excellent flavor, remains in condition for use as long as any variety in cultivation. Plant medium sized, with very few outer leaves, which are deep green and very thick, while the inner ones blanch to a bright yellow and are exceedingly well flavored, crisp and tender. This is certainly one of the best varieties for Summer use.

Pkt., 5c; oz., 15c; ¼ lb., 30c; lb., $1.00

Early Tennis Ball

The plant is small, of rapid growth, and should be used as soon as large enough, as it quickly runs to seed. Leaves dark green, thick and crisp. One of the best for growing under cover, and for forcing.

Pkt., 5c; oz., 15c; ¼ lb., 30c; lb., $1.00

Salamander

For Hot Dry Sections

A fine medium early lettuce of good size, forms compact heads, crisp, tender and of a fine buttery flavor. Creamy white head with outer color light green; stands drouth well and is slow to seed.

Pkt., 5c; oz., 15c; ¼ lb., 40c; lb., $1.25

Hanson

Improved Hard Heading Stock

One of the very best. Heads green outside and white inside; grow to a remarkable size, very solid, and is deliciously sweet, crisp and tender. It withstands the hot sun well.

Pkt., 5c; oz., 15c; ¼ lb., 35c; lb., $1.25

Simpson's Early Curled

A leading market variety used for very early planting and forcing. Forms a dense mass of finely curled and wrinkled leaves that are excellent and tender, and do not wilt readily.

Pkt., 5c; oz., 15c; ¼ lb., 30c; lb., $1.00

Black Seeded Simpson

Forms a close, compact mass of curly leaves of a yellowish green.

Pkt., 5c; oz., 15c; ¼ lb., 30c; lb., $1.00

Early Prize Head

Standard sort; one of the best thin leaved, clustering varieties. The very large leaves are savoyed or crimped, bright green, tinged with red, and are exceedingly tender, crisp and sweet, forming a large, loose head. One of the best for the garden, but not good to ship long distances.

Pkt., 5c; oz., 15c; ¼ lb., 30c; lb., $1.00

Brown Dutch

Forms a large, solid head, sweet, tender and of good flavor. Outer leaves are tinged with brown. Very hardy.

Pkt., 5c; oz., 15c; ¼ lb., 35c; lb., $1.25

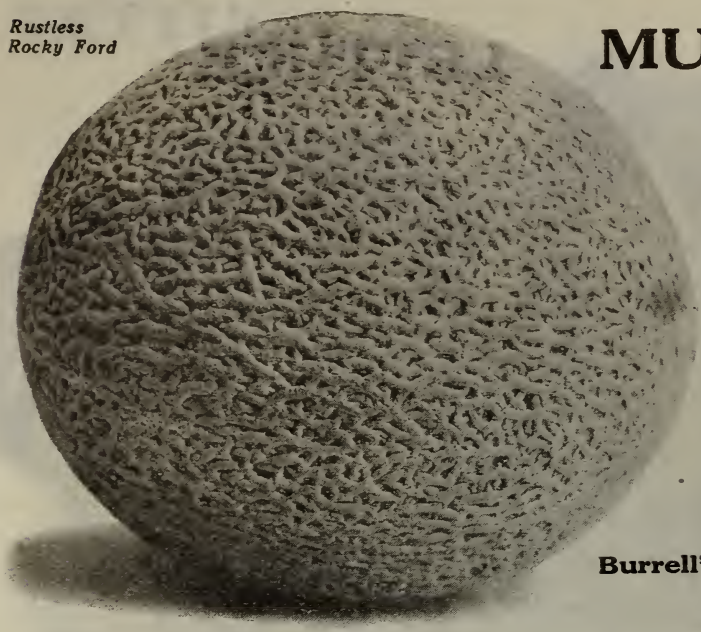
BEST OUT OF 5 VARIETIES

Twin Falls, Idaho

Gentlemen:

I used "Crispette" and "New York Wonderful" Lettuce Seed for early planting and they are both the best I tried among 5 varieties from elsewhere.

O. T. FULLER



Rustless Rocky Ford

MUSKMELONS

CULTURE.—*Plant in hills four to six feet apart each way, after danger of frost is past and ground is warm; enrich well with well-rotted manure and plant the seeds just under the surface, not too deep. One ounce to fifty hills; two to three pounds per acre.*

Melons thrive best on warm, light soils, but good crops are obtained on heavy ground if it is rich and well drained; in cultivating, hill up by drawing the soil toward the plant. Use Bug Death, lime, slug shot or land plaster for destroying insects.

Burrell Gem

The Perfect Melon for Market or Home Gardens

"Burrell's Gem" has a tough, thin rind, well arched ribs, covered with a closely interlaced gray netting; shape elongated, being about 4½ inches in diameter by 6 inches long, flesh of a reddish orange, very thick, fine grained and spicy, seed held firmly in a triangular cavity. This is the secret of a good shipping melon. If the seeds shake loose easily a melon will quickly decay.

Pkt., 5c; oz., 15c; ¼ lb., 35c; lb., $1.00

Rocky Ford or Netted Gem

The most popular and best seller among Muskmelons. The fruit is oval, slightly ribbed, densely covered with coarse netting. Flesh thick, green, very sweet and highly flavored. The fruit is wonderfully uniform in shape and quality. Grown largely in Colorado and shipped in carload lots all over the country. The favorite with market gardeners everywhere.

Pkt., 5c; oz., 10c; ¼ lb., 25c; lb., 75c

Cassaba

This is an excellent melon and much sought after. Large, rather oblong; well ribbed; skin thin, and of greenish yellow color; flesh two to three inches thick, delicious and melting. None better; matures late; keeps well.

Pkt., 5c; oz., 15c; ¼ lb., 40c; lb., $1.25

Burrell's Rustless Rocky Ford Cantaloupe

See Cut

This new melon, the highest development of the "Rocky Ford" type, has light green flesh which is very deep, rich and delicious, the quality being unsurpassed. It is solidly netted, thrifty, vigorous, rust resistant and a continuous bearer until frost. Ninety-five per cent of the seed crop were choice, standard size melons.

Pkt., 5c; oz., 15c; ¼ lb., 50c; lb., $1.50

Emerald Gem

The superior quality of "Emerald Gem" makes it most desirable for home gardens. The flesh is very thick, of a dainty salmon color, and the flavor is the finest and sweetest of all melons. The skin is smooth and of a deep emerald green; rind thin; it bears early and is very prolific.

Pkt., 5c; oz., 15c; ¼ lb., 35c; lb., $1.00

Small Green Nutmeg

A variety ripening early. Flesh, green, fine and sweet. Superior for the early market, or family garden, and a favorite for hotels and restaurants.

Pkt., 5c; oz., 10c; ¼ lb., 25c; lb., 75c

Osage, or Miller's Cream

One of the finest flavored melons in cultivation, and highly recommended. The flesh is of a rich salmon color, very sweet and melting in quality.

Pkt., 5c; oz., 10c; ¼ lb., 25c; lb., 75c

Paul Rose, or Petoskey

Created by a cross between the "Netted Gem" and "Osage"; fruit oval, about five inches in diameter, rich orange in color, sweet and highly flavored.

Pkt., 5c; oz., 15c; ¼ lb., 35c; lb., $1.00

Well-Known and Popular Varieties

	Pkt.	Oz.	¼ lb.	Lb.
JENNY LIND.—Extra early, flesh green, fine flavor	**5c**	**10c**	**25c**	**75c**
EXTRA EARLY HACKENSACK.—Flesh green, delicious, juicy and sweet; medium size	**5c**	**10c**	**25c**	**75c**
LARGE YELLOW CANTALOUPE.—Early and productive; flesh salmon color, rich, sweet	**5c**	**15c**	**35c**	**$1.00**

"DIAMOND" FERTILIZERS are an investment, not an expense, and will repay many times their cost.—Ask for Free Booklet.

WATERMELONS

CULTURE.—*Watermelons thrive best on light, well-drained soils, but give good results on any good rich garden soil that is properly drained and cultivated. Plant after the weather is settled and ground warm. Hills should be eight feet apart each way and with well rotted manure thoroughly worked into each hill. One ounce of seed will plant thirty hills; two to three pounds per acre. Thin to two or three plants per hill.*

Tom Watson

This excellent new melon is of elongated form, averaging 18 to 24 inches in length, 10 to 12 inches in diameter, has a thin, dark green rind and deep red flesh; crisp and sugary, with a lusciousness and distinctive flavor that makes it one of the finest melons ever produced; is hardy, early and stands handling and long shipment. We consider it a valuable market or home variety.

Pkt., 5c; oz., 15c; ¼ lb., 35c; lb., $1.00

Halbert Honey Watermelon

This superb Melon is a great improvement over the well-known "Kleckley Sweets," as it fully equals it in delicious flavor and crispness, is more uniform in outline, darker in color, more vigorous and productive, and will ripen perfectly in the cooler sections where other varieties fail. The average length is eighteen to twenty inches, both ends being blunt and fully rounded out. The rich, dark, glossy green, the thin rind and the bright crimson make the new "Halbert Honey" the most attractive Watermelon.

Pkt., 5c; oz., 15c; ¼ lb., 35c; lb., $1.00

Kleckley's Sweet, or Monte Cristo

A splendid sort for home use or near markets Vine vigorous and productive; fruit of medium size; oval; color dark, mottled green in two shades, forming indistinct stripes. Flesh a beautiful bright rich red; exceedingly sweet and tender.

Pkt., 5c; oz., 10c; ¼ lb., 25c; lb., 65c

Sweet Heart

This melon has become very popular as a shipping melon. Vine vigorous and productive, ripening its fruit early. Fruit large, oval, very heavy, uniformly mottled dark and very light green; rind thin, but firm; flesh bright red, firm, solid, but very tender, melting and sweet. Fruit retains its good quality for a long time after ripening.

Pkt., 5c; oz., 10c; ¼ lb., 25c; lb., 60c

Cuban Queen

A very fine variety, growing to a great size; flesh bright red, solid and sweet. The skin is beautifully striped dark and light green. Melons are wonderfully solid; rind thin. They are enormously productive and ripen early.

Pkt., 5c; oz., 10c; ¼ lb., 25c; lb., 60c

Ice Cream, or Peerless

A grand favorite and standard variety. Superior in every respect. Has beautiful crimson core, which is always fine grained; can not be surpassed in flavor; very prolific.

Pkt., 5c; oz., 10c; ¼ lb., 25c; lb., 60c

Fordhook Early

A fine extra early melon. Fruit of good size; skin dark green; flesh bright and crisp, sweet and good quality; rind thin, but tough. Good shipper.

Pkt., 5c; oz., 10c; ¼ lb., 25c; lb., 60c

Well-Known and Standard Varieties

	Pkt.	Oz.	¼ lb.	Lb
DARK ICING.—Early, round, solid, with thin dark green skin; of superb quality.	5c	10c	20c	60c
FLORIDA FAVORITE.—Large and long; rind firm; flesh deep red.....	5c	10c	20c	60c
PHINNEY'S EARLY.—Early, hardy; flesh pink; very sweet, tender and crisp...	5c	10c	20c	60c
CITRON.—(Red or Green Seeded.) Round and handsome; for preserving only..	5c	10c	25c	75c

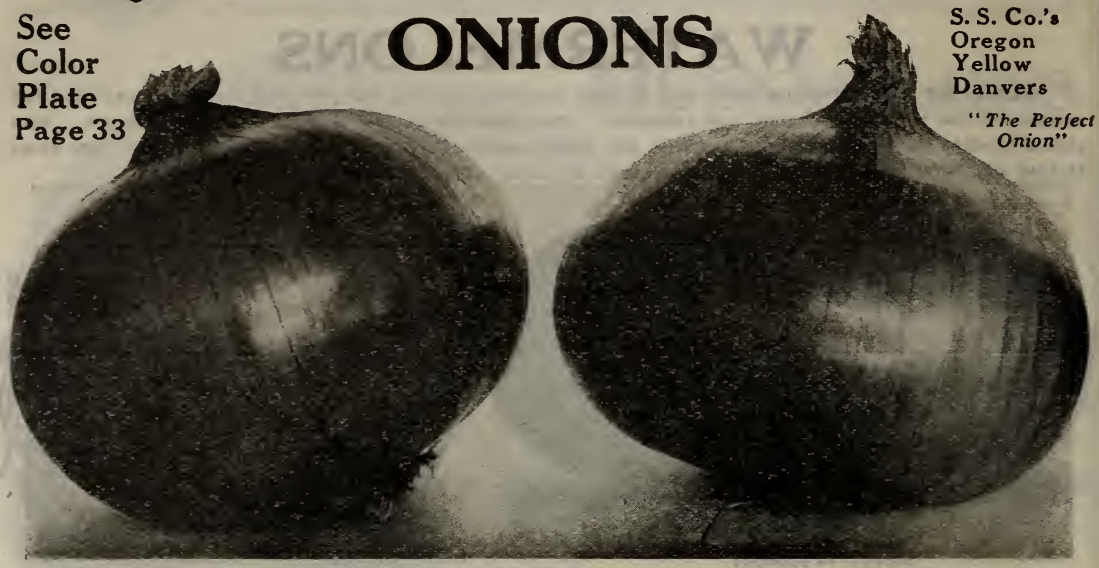
☛ **YOU NEED the NEW ENCYCLOPEDIA of HORTICULTURE**—for the Northwest. Tells you in plain language just what you must know to succeed. You can turn in a moment to any subject—and not only one but several high authorities, big practical men have prepared for you in this book the answers to your questions. Not theory but recent successful practice. This wonderful work in 4 volumes is within the means of everyone. SEE BOOK LIST. PAGE 61.

See Color Plate Page 33

ONIONS

S. S. Co.'s Oregon Yellow Danvers

"The Perfect Onion"



WE are large growers of Onion Seeds and Sets, and for years have been specializing on varieties that attain their greatest perfection in the Northwest and believe in our "OREGON YELLOW DANVERS" we have the finest type of Danver Onion ever offered, and recommend it to all commercial growers.

CULTURE.—*For best results in Onion growing, the soil should be deep and rich; bottom land of rather loose texture being preferred—(beaverdam soil is best).*

Sow 2½ or 3 lbs. of seed per acre, as early in the season as the ground can be put into proper condition, using some good fertilizer such as our special Onion Fertilizer, or manure supplemented with Bone Meal, Muriate of Potash, and in some cases Nitrate of Soda, the latter often being used after the plants are up, while the other fertilizers are worked into the soil before the seed is sown. Hardwood ashes may take the place of the Muriate of Potash.

Thorough clean cultivation and thinning during the growing season is necessary.

In the Fall the tops of the Onions will naturally fall to the ground and shrivel up and the roots let go their grip on the soil, when the Onions should be lifted and allowed to dry off for a day or two before storing away. If the weather remains too wet to dry off in the fields, the Onions may be put under open sheds for a while where there is a good circulation of air.

In case the tops do not die off naturally, they may be broken down and so cause the bulbs to ripen quicker, but such Onions will not make good keeping bulbs, and should be disposed of as soon as possible.

To be sure of a good crop, sow none but the best of seed—it may cost a little more than a cheaper grade of seed, but it is worth more than the difference in the price.

Spokane Seed Co.'s Oregon Yellow Danvers

Color Plate Page 33

This is the variety generally planted in the Northwest. The largest crops of onions and the best keepers, bringing the highest prices on the Pacific Coast markets are the **Oregon Yellow Danvers. The bulbs are uniformly large, of a half-globe in shape, with small necks,** and as a market or table onion can not be excelled.

Our seed is grown specially for us by the best onion seed growers in Oregon. No onion grower can afford to plant anything inferior when such seed can be obtained. **Pkt., 5c; oz., 25c; ¼ lb., 75c; lb., $2.50** Sow as soon as ground can be prepared in the Spring. Give clean culture. An ounce of seed should drill 150 feet—3 to 4 lbs. per acre. *If you contemplate a large planting, write us.*

Australian Brown

This onion resembles the Oregon "Yellow Danvers" in general appearance, but has a clear, amber-brown skin that attracts buyers. It matures early, ripens uniformly, and will keep in good condition longer than any other onion. For late sowing and when necessary to replant. Australian Brown heads the list.

Pkt., 5c; oz., 20c; ¼ lb., 60c; lb., $2.00

Yellow Globe Danvers

A very handsome, round or globe-shaped variety of large size, with thin, yellowish skin, white flesh, fine grained, mild, very firm, and the best of keepers. It ripens early.

Pkt., 5c; oz., 20c; ¼ lb., 60c; lb., $2.00

Large Red Wethersfield

A standard variety; one of the most productive kinds, even in poor soil. Its good keeping qualities render it one of the best for shipping.

Pkt., 5c; oz., 20c; ¼ lb., 60c; lb., $2.00

Prizetaker—The Genuine

The Handsomest and Largest Yellow Globe Onion

Of fine flavor, handsome shape and enormous size. A perfect globe shape, with a bright straw-colored skin; the necks are very small and the onions always ripen up hard. A good variety for transplanting, which is sometimes necessary to secure a crop especially on upland.

Pkt., 5c; oz., 20c; ¼ lb., 60c; lb., $2.00

☛ COLOR PLATE, PAGE 33 Shows the great care exercised in growing our wonderful Strain of Oregon Yellow Danvers.

ONIONS—Continued

White "Bunching" Onion

This variety is especially useful to market gardeners for producing an attractive "green onion." The young stalks blanch to a beautiful clear white and are crisp and mild, attaining a good size before the bulb forms.

Pkt., 5c; oz., 20c; ¼ lb., 50c; lb., $1.75

White Bermuda

A beautiful market variety for fancy trade; color a delicate pinkish straw; flavor very mild.

"White Bermuda" matures in less than six months from the time of sowing, and we believe it to be a valuable early onion for our Coast growers. Try it. **Pkt., 5c; oz., 25c; ¼ lb., 75c; lb., $2.50**

Red Bermuda

Identical with the White except in color, which is a pale, translucent red. This is the ideal early onion wherever the red variety is preferred.

Pkt., 5c; oz., 25c; ¼ lb., 75c; lb., $2.50

Extra Early Red Flat

A medium-sized, flat variety: comes into use nearly two weeks earlier than the Large Red Wethersfield.

Pkt., 5c; oz., 30c; ¼ lb., 75c; lb., $2.50

White Portugal or Silver Skin

Skin and flesh pure white; mild flavor and flat shape; grown largely for sets.

Pkt., 5c; oz., 30c; ¼ lb., 75c; lb., $2.50

White Bunching

Well-Known and Popular Onions

	Pkt.	Oz.	¼ lb.	Lb.
YELLOW FLAT DANVERS.—Largely planted. Flesh fine grained; mild; white; good keeper	5c	20c	60c	$2.00
EXTRA EARLY BARLETTA.—A small, pure white, mild onion; fine for pickles	5c	20c	60c	2.00
WHITE GLOBE.—Flesh very white, fine, rich and sweet; fine keeper	5c	30c	75c	2.50
GIANT ROCCA.—Large, globe-shaped; skin reddish-brown; flesh mild, sweet flavored	5c	20c	60c	2.00
MAMMOTH SILVER KING.—Very large and attractive; skin white; flesh fine grained and mild	5c	20c	60c	2.00
QUEEN.—If sown thickly, produces small, very firm bulbs, the best of all for pickling; if given more room, matures an excellent onion, that will keep all Winter	5c	20c	60c	2.00

Onion Sets—Pound Prices Postpaid

Bottom Onion Sets

Small onions grown from seed that has been sown too thickly to attain a large size. The small onions (about ½ inch in diameter) thus obtained are planted out and are ready in a short time to pull as green onions for the table or bunched for the market. If left to stand they make ripe onions of the best quality, and come to maturity some six weeks earlier than a crop grown directly from the seed. **Per lb., 25c**

For Garlic see page 19.

Top Sets

Produced in clusters. **Per lb., 25c**

Shallots

Valuable for bunching or for an early crop. The smallest sets make fine bulbs of good size, while the larger ones produce a cluster of small to medium-sized bulbs. Light brown skin; mild, white flesh. **Per lb., 30c**

Bottom Multiplier

Potato Onion Sets, Per lb., 30c

Okra or Gumbo

Improved Dwarf Green

Very early, with long, green, slender pods.

Pkt., 5c; oz., 10c; ¼ lb., 25c; lb., 60c

White Velvet

The pods are smooth or very slightly ribbed, large; remain tender a long time.

Pkt., 5c; oz., 10c; ¼ lb., 25c; lb., 60c

"Diamond Quality"

GARDEN PEAS

Selected, Hand Picked

For single lbs. by mail add 10c postage—Larger lots at parcel post rates 10c pkts., are postpaid.

Little Marvel

GARDEN PEAS are one of the most important crops, and we have spared no effort to select and improve the best strains of the most profitable and satisfactory varieties. These selected strains, grown under our direct supervision for many years, will give you the biggest yield and the handsomest, sweetest, best flavored Peas for early market or home garden. The varieties offered have proved by growing tests to be the best of their kind and class.

Extra Early Peas

New—Richard Seddon

A dwarf English Pea of the finest quality; very early. Has large shapely pods well filled. Is sweet and delicious. A hardy, prolific Pea of the greatest merit. As early as American Wonder and far more prolific. Try it.

Pkt., 10c; lb., 25c; 10 lbs., $2.00

Alaska or Earliest of All

The Standard Extra Early Variety

A smooth, blue pea, of even, vigorous, growth and extra early maturity. Vines two to three feet high, unbranched, bearing four to seven long pods, which are filled with medium-sized, bright green peas of excellent flavor. A great favorite with our market gardeners for Fall or early Spring planting.

Pkt., 10c; lb., 15c; 10 lbs., $1.25

Little Marvel

A Splendid New Dwarf Pea for Home or Market

The dwarf, bushy vines averaging 15 inches are loaded with firm, square-ended pods 2½ to 3 inches long, tightly filled with plump, luscious, deep green peas. "Little Marvel" is as early as "American Wonder," fully equals the superb quality of "Nott's Excelsior" and far outyields these two popular sorts. Pkt., 10c; lb., 20c; 10 lbs., $1.75

Blue Bantam

Extremely early, "Blue Bantam" excels in the size of pods and quality of the sweet large dark green Peas with which they are filled, and is said to surpass all extra early dwarf varieties in yield. Very dwarf and hardy.

Pkt., 10c; lb., 20c; 10 lbs., $1.75

"SOME GAIN"—You Can Do As Well

Gentlemen: Empire, Oregon, Feb. 6, 1915.

The seeds were received by me in splendid condition. I saved $16.00 by sending to you. That is some gain.

JOHN COTTELL.

It's Easy to Inoculate Peas and Beans with **FARMOGERM**—Increases the Yield—Improves the Quality Builds Up Your Soil—SEE PAGE 61.

Early Garden Peas—Continued

For single lb. by mail add 10c postage. Larger lots at parcel post rates. 10c packets are postpaid.

Laxtonian

A new, early, dwarf, robust, large podded pea of superior excellence; often referred to as "Dwarf Gradus," and is said to surpass "Gradus" in yield and quality, with the added advantage of dwarfer growth, averaging 16 inches. The large pods are well filled, holding 8 to 10 peas.

"Laxtonian" is so highly recommended that you should give it a trial. **Pkt., 10c; lb., 20c; 10 lbs., $1.75**

American Wonder

One of the most popular and best of the early wrinkled sorts. A great favorite for family use. Has stout, branching vines, covered with well-filled pods containing seven or eight large, exceedingly sweet, tender and well-flavored peas. Height 10 to 12 inches.
Pkt., 10c; lb., 15c; 10 lbs., $1.25

Gradus

This extra early, wrinkled pea bears pods of large size and combines quality with earliness. It is very hardy; can be planted fully as early as the smooth peas; growth, vigorous and healthy; vines 2½ feet in height; very prolific. The quality and flavor are delicious and the peas remain tender and sweet for a long time.
Pkt., 10c; lb., 20c; 10 lbs., $1.75

Nott's Excelsior

The most desirable sort for the market gardener, and unexcelled for the home garden. Very hardy. The pods contain from six to nine large peas, which are unusually fine flavored and tender.
Pkt., 10c; lb., 15c; 10 lbs.,$1.25

Veitches Perfection

Highly esteemed for its splendid quality and great productiveness. Pods are long and well filled with large, fine-flavored Peas. A standard medium or late market and canning variety desirable on account of its extraordinary yield.
Pkt., 10c; lb., 20c; 10 lbs., $1.50

Premium Gem

One of the earliest dwarf varieties, coming in a little later than the "American Wonder;" grows taller, much more productive and continues in bearing longer. The quality of the pea is very superior. Height, 15 inches. **Pkt., 10c; lb., 15c; 10 lbs., $1.15**

Spokane Seed Co.'s Magnificent

Through an unfortunate accident resulting in the loss of stock, we will be unable to supply our famous **"Magnificent"** Pea this season, but another year we hope to again offer this most excellent variety to our trade.

"LAXTONIAN" for Market or Home Garden

Main Crop Varieties

Telephone—Tall

A Great Favorite With Our Market Gardeners.

Immensely productive, of the finest quality and excellent, sugary flavor; vines strong; the pods are of large size, filled with large, luscious peas; height four feet. **Pkt., 10c; lb., 20c; 10 lbs., $1.25**

USE FARMOGERM

ON GARDEN PEAS --- Insures the maximum yield and improves the soil. SEE FERTILIZERS

Improved Stratagem

One of the best of the large podded peas; the pods are of immense size filled with large, dark green, wrinkled peas of the finest quality; vine of medium height, but very stocky, with very broad, light green leaves, and bearing an abundance of large, handsome pods.
Pkt., 10c; lb., 15c; 10 lbs., $1.25

Yorkshire Hero

One of the largest, sweet, wrinkled kinds; vines strong and spreading; pods of good size and well filled; much in use, and has enjoyed a long popularity; medium late; bears a long time; height, 2½ feet. **Pkt., 10c; lb., 15c; 10 lbs., $1.15**

THANK YOU, MR. CLARK

Yacolt, Wash., April 28, 1915.

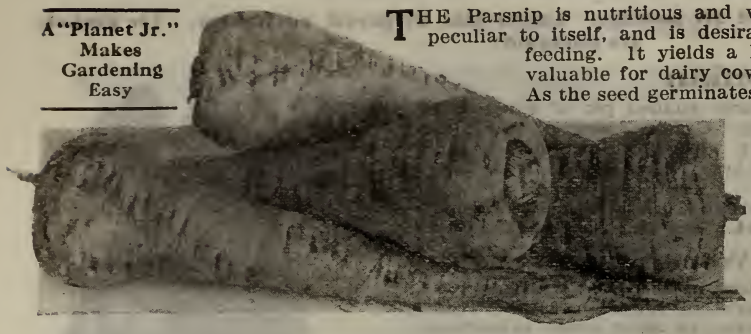
Gentlemen:

My seeds arrived O. K., and are all planted, and doing well. Needless to say I am far, and, away, more pleased with such treatment than the amount involved as it tends to show the strictly honest business method in vogue in the conduct of your business.

FRANK CLARKE.

PARSNIPS

A "Planet Jr." Makes Gardening Easy



THE Parsnip is nutritious and wholesome, with a sugary sweetness peculiar to itself, and is desirable both for the table and stock feeding. It yields a large crop, and is said to be more valuable for dairy cows than either the carrot or turnip. As the seed germinates very slowly, sow as early in Spring as possible, in drills fifteen inches apart on deeply cultivated, rich, loamy soil. Keep clear of weeds and thin to three or four inches apart. The roots of the parsnip are improved by freezing.

Early Round

Medium sized, top shaped, easily dug, has a fine rich flavor—good for home gardens.

Pkt.,5c;oz.,10c; ¼lb.,20c;lb.,50c

Hollow Crown or Long White

Root very long, white, smooth, tender, sugary, and of most excellent flavor. Very hardy; will keep through the Winter without protection.

Pkt., 5c; oz., 10c; ¼ lb., 20c; lb., 50c

Guernsey. Half Long

Root white, very tender, with a smooth, clear skin. Shorter and thicker than "Hollow Crown;" desirable for stiff soils.

Pkt., 5c; oz., 10c; ¼ lb., 20c; lb., 50c

Parsley

Very useful for flavoring soups, meats and for garnishing. The green leaves are used for flavoring or they may be dried crisp, rubbed to a powder and kept in bottles until needed.

Fine Triple-Curled, or Myatt's Garnishing

A fine, free growing, but not large variety. The plants bear a great number of leaves, which are so abundant and so finely curled that they resemble a bunch of moss.

Pkt., 5c; oz., 10c; ¼ lb., 25c; lb., 75c

Turnip-Rooted, or Hamburg

The root, which resembles a small turnip, is the edible portion of this variety. Extensively grown and used for flavoring soups, etc.

Pkt., 5c; oz., 10c; ¼ lb., 25c; lb., 75c

Champion Moss Curled

A compact growing, finely cut and much curled variety of a bright green color.

Pkt., 5c; oz., 10c; ¼ lb., 25c; lb., 75c

Rhubarb or Pie Plant

CULTURE.—Rhubarb succeeds best in deep, rich, somewhat retentive soil. The richer its condition and the deeper it is stirred the better. Sow in drills an inch deep and thin out the plants to six inches apart. In the Fall transplant the young plants into very highly manured and deeply stirred soil, setting them four to six feet apart each way, and give a dressing of coarse manure each Spring. The stocks should not be plucked until the second year and the plant never allowed to exhaust itself by running to seed

Victoria, or Mammoth

Very large; finest cooking variety.

Pkt., 5c; oz., 15c; ¼ lb., 40c; lb., $1.25

Giant Linnaeus

A large early variety, very tender and of fine flavor. **Pkt., 5c; oz., 15c; ¼ lb., 40c; lb., $1.25**

Rhubarb Roots.—From October to June we can always supply one- or two-year-old Rhubarb-Roots. Customers wanting only a few dozen roots for home gardens will save much valuable time by ordering roots instead of seed. For prices, see Plant Department.

PUMPKIN

CULTURE.—*Pumpkins will grow on any good farm land, but their size and quality will depend on the culture and fertility of the soil. Plant early in May, in hills six to eight feet apart. One pound of seed will plant about 300 hills. Care should be taken to keep the different varieties well apart, also away from other vining plants, as they mix and deteriorate very rapidly.*

Sweet or Sugar and Winter Luxury are good Pie Pumpkins

Sweet, or Sugar

A handsome and productive small pumpkin; skin, orange; flesh, deep yellow, fine grained and very sweet. This is the famous **"New England Pie Pumpkin."**

Pkt., 5c; oz., 10c; ¼ lb., 25c; lb., 75c

Mammoth Tours

A productive French variety; grows to an enormous size. **Pkt., 5c; oz., 10c; ¼ lb., 35c; lb., $1.00**

Tennessee Sweet Potato

Pear shaped; flesh thick, cream white, fine grained and of excellent flavor.

Pkt., 5c; oz., 10c; ¼ lb., 20c; lb., 65c

Large Yellow, or Connecticut Field

Large, round; deep, glossy yellow. Vines vigorous and very productive; good keeper. Grown extensively for stock feeding.

Pkt., 5c; oz., 10c; ¼ lb., 20c; lb., 50c

Winter Luxury

The best flavored pie pumpkin grown; enormously productive; excellent keeper; medium size; color, golden-russet, finely netted; flesh, deep golden, sweet, tender and very thick; none better.

Pkt., 5c; oz., 10c; ¼ lb., 20c; lb., 65c

Giant of All
"King of Mammoths"

This colossal Pumpkin is almost a globe in shape. The skin is of a beautiful, rich golden yellow; flesh firm, fine grained and deep yellow, sweet flavored, very thick and of excellent quality for so mammoth a variety. These Pumpkins attain an enormous size and will carry away prizes at your county fairs.

Large pkt., 10c; oz., 15c; ¼ lb., 35c; lb., $1.00

Large Sweet Cheese

A popular variety. Fruit flattened; skin mottled light green and yellow. Flesh, yellow, thick, tender; very nutritious and of excellent quality; a most productive variety.

Pkt., 5c; oz., 10c; ¼ lb., 20c; lb., 65c

PEPPER—Continued on Page 32

Sow the seeds early in hotbeds; or later, when the weather becomes warm, in open beds. When two or three inches high, transplant to a warm, mellow soil, in rows eighteen inches apart and a foot apart in the rows. Guano and hen manure are excellent fertilizers and will greatly increase the yield.

NEW NOCERA.—A Giant Red Pepper of largest size; mild and very fleshy; a favorite English variety. **Pkt., 5c; oz., 35c; ¼ lb., $1.00**

	Pkt.	Oz.	¼ lb.
RUBY KING.—Very large, sweet and mild; bright scarlet	5c	25c	75c
LARGE BELL, or BULL NOSE.—Large, mild, thick fleshed variety. One of the best for stuffed pickles	5c	25c	75c
GOLDEN DAWN.—Bright, golden yellow; very productive; entirely free from fiery flavor	5c	25c	75c
SWEET SPANISH, or MOUNTAIN.—Of the largest size, bright scarlet. Excellent for pickling and stuffing	5c	25c	75c
CAYENNE.—Pods long; bright red; very pungent and used very largely with pickles when green	5c	25c	75c
CHILI.—Pods small and pointed; brilliant scarlet; very pungent when ripe	5c	25c	75c

Try NEW "PERFECTION" SWEET PEPPER. See description Page 32

PEPPER—Continued.

The New "Perfection" Pepper

Perfection comes to us from the South, and our trials last season proved its right to be known as the "perfect pepper." It can be used green, but when ripe the color changes to a most brilliant deep scarlet and the smooth, large peppers are heavy and solid, the flesh being 3 times as thick as in other sorts. For quality and sweetness we have never seen its equal. The peppers are so smooth and uniform that by heating them over the fire or boiling a little the skins can be slipped off—or they can be pared like an apple. The growth is vigorous and the yield is very much greater than other sorts, as they bear early and continually until frost.

Pkt., 10c; oz., 50c; ¼ lb., $1.75

New Chinese Giant Sweet

The largest and best of the mild Red Peppers. The fruits are four to five inches in diameter, borne in clusters on the thick, stocky bushes, that are well branched, and grow about two feet high; color, brilliant, deep red; vigorous and about as early as Ruby King.

Pkt., 10c; ½ oz., 25c; oz., 40c; ¼ lb., $1.25

New Sweet Pepper Perfection

☞ PEPPER PLANTS IN SEASON — See Plant Dept.

Diamond Quality **SEED POTATOES** True Type Market Size

See Color Plate of Our Four Leaders—Page 34

FOR more than eighteen years we have been growing seed Potatoes by careful re-selection, and comparative tests in various sections have shown that our select seed will produce the largest crops and more uniform salable tubers with average soil and culture, and have proven profitable and satisfactory under the conditions for which they are recommended.

The value and importance of Potatoes in rotating, and as a money crop should be more generally recognized, and to secure a ready market and increase your profits you should grow only the best standard market sorts that are known to be suited to your soil and are in demand in your market. We have never known the time when fancy stock could not be sold at a fair price even when the market was overloaded.

STANDARD EARLY VARIETIES

Early Freeman

A vigorous, productive, early potato of oval shape with russet skin, fine grained, white and floury. Not quite as early as **"Earliest of All,"** but much earlier and a far better yielder than other very early varieties. Tubers shapely and uniform, with very few small ones. We specially recommend **Early Freeman** as a potato of **real merit.** Try it.

Price, mail, 1 doz. eyes, 30c; 4 lbs. whole potatoes, 60c, postpaid. Frt. or Exp., pk., 75c; ½ bu., $1.00; bu., $1.75; 100 lbs., $2.50.

Early Sunrise

The best early pink variety—earlier than Rose, about the same depth of color, not so flat but a smoother potato, a bit more slender than Rose; Sunrise is hardy, has always been free from blight, and is the best yielder of its type.

Price, postpaid, 4 lbs. whole potatoes, 60c; Frt. or Exp., peck, 75c; ½ bu., $1.00; bu., $1.75; 100 lbs., $2.50.

Early White Prizetaker

One of the finest of all early sorts; oblong in form, 4 or 5 inches in length, with white, smooth skin and few eyes. It is a very superior cooking potato, baked or boiled, cooking up dry and floury.

White Prizetaker has important advantages over other early Potatoes, as its white skin, large size and good keeping qualities make it an ideal main crop variety, that sells at the best price. We always advise early planting, as the crop will be larger and better.

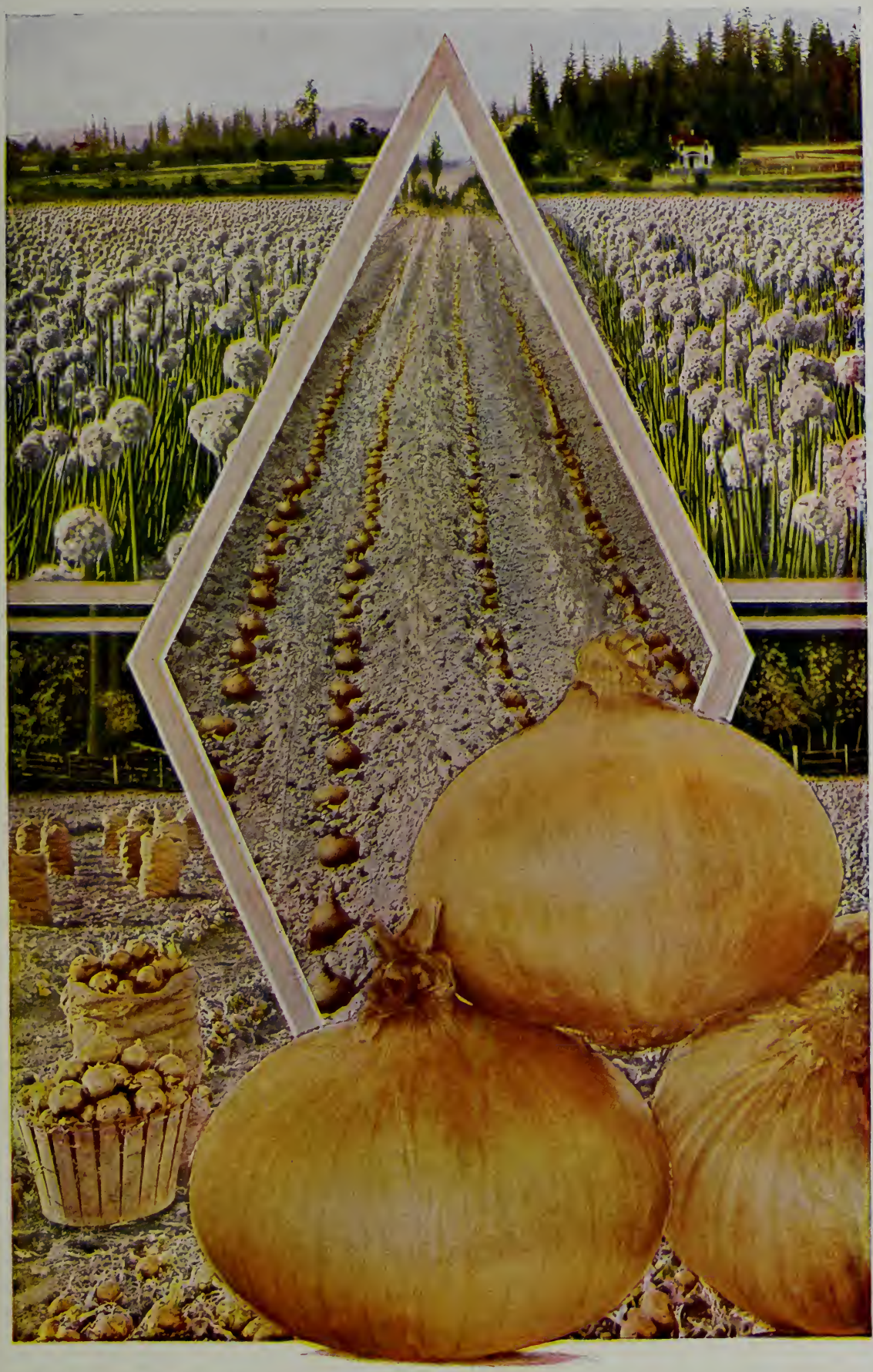
PRICE, postpaid, 4 lbs. whole potatoes, 60c; Freight or Express, peck, 75c; ½ bu., $1.00; bu., $1.75; 100 lbs., $2.50.

Early Rose

Our stock of this popular variety is a special improved strain of our own growing; is very vigorous and extremely early.

Price, postpaid, 4 lbs. whole potatoes, 60c; Frt. or Ex., peck, 75c; ½ bu., $1.00; bu., $1.75; 100 lbs., $2.50.

☞ **OUR SEED POTATOES** are all market size, true type and free from disease. We do not recommend planting undersized or cull potatoes. **Only the best should be used for seed.**



EVERY ONION PLANTED for the production of our famous OREGON YELLOW DANVERS ONION SEED is carefully s lected to type, color and size, then placed in the row for inspection before being covered. This is expensive but has made our special strain of Oregon Yellow Danvers the most uniform, heaviest yielding Danver's Onion. Illustrations are from photos of our seed fields. SEE PAGE 26.

FOUR SPLENDID VARIETIES that are noted for their table quality, yield and clean, healthy, vigorous growth. They are in big demand and will prove profitable and satisfactory under the conditions for which they are recommended.

☞ *"Pride of Multnomah" from our Oregon grown seed, won the California State Competition at the PANAMA-PACIFIC FAIR for largest yield, one acre. 790 BUSHELS OF FIRST-CLASS POTATOES. They were grown by Boa Vista Ranch, Placerville.*

"PRIDE OF MULTNOMAH" grown by Boa Vista Ranch from our Oregon grown seed. Won the State Competition at the Panama-Pacific Exposition, for best acre of Potatoes grown in California.

Mr. E. H. Phreaner, Boa Vista Ranch, large growers who specialize in Potatoes, writes:

"We are very pleased with the results obtained from your seed ('Pride of Multnomah' and 'Snow') and will be in the market for several cars of seed Potatoes and would like to have samples of varieties you have to offer. Have just received word that our exhibit of Potatoes at the Panama-Pacific International Exposition won the Grand Prize."—Boa Vista Ranch also won the competition for the best acre of Potatoes, 790 bushels clean healthy stock. "Pride of Multnomah."

PRIDE OF MULTNOMAH—Main Crop

Excels in Yield and Table Quality

PRIDE OF MULTNOMAH Potato was first offered seven years ago and is the best main crop potato for Western Oregon. During these years we have distributed it to many sections of the United States, always receiving splendid reports, and up to the present time have yet to find a variety combining so many desirable qualities.

PRIDE OF MULTNOMAH excels in yield, uniformity, and table quality, being fine-grained, of snowy whiteness, and for baking or boiling has no superior. Its skin is thin, smooth and white; eyes shallow. In form they are the ideal elongated type so much in demand by commercial growers. It is also the best keeping potato we have ever known.

PRIDE OF MULTNOMAH is blight and disease resistant to a remarkable degree, and during the seven years we have grown it there has never been a crop failure. The top growth is vigorous and a mass of fine fibrous roots enable it to withstand drouth. Should be planted early to insure perfect maturity and finest quality.

Order now and have your potatoes when you are ready to plant. We have never had enough to fill **all orders. Don't you be the one that is disappointed.**

PRICE, postpaid, 1 doz. eyes, 30c; 4 lbs. whole potatoes, 60c; Freight or Express, 1 peck, 75c; ½ bu., $1.25; bu., $2.00; 100 lbs., $3.00.

"Earliest of All"

Never Known to Blight

Can be had ready for baking nine weeks from planting, and fully matured in 12 weeks.

We have yet to find an early potato that can compare with our **"Earliest of All."** Its quick growth and early maturity gives the ground for July planting, and a **second crop can be grown the same season.** Summer drouth does not affect it, for its growth is complete before it can be injured. Planted early is ideal for "Dry Farming." "Earliest of All" was originally a selection from "Eureka" showing a marked difference in habit and greatly increased yield which years of careful reselection have firmly fixed and improved.

"EARLIEST OF ALL" is a healthy, vigorous grower not subject to blight or disease, and does not make a second growth. Keeps as well as any late potato.

A handsome, shallow eyed, white-skinned potato of the finest table quality. This is the popular Early White potato sold in the public market.

PRICES: 1 doz. eyes, postpaid, 30c; 4 lbs., whole potatoes, 60c, postpaid; by Freight or Express, per peck, 75c; ½ bu., $1.25; bu., $2.00; 100 lbs., $3.00

"PRODUCER"

A large smooth oval white potato with shallow eyes, of finest table quality; will not "boil to pieces," and baked has no superior; is a hardy, vigorous grower that earned its name of **"Producer"** on account of its enormous and never failing yield.

"Producer" is a seedling we have had on trial for several seasons, and it has always given a big crop even when conditions were very unfavorable and in dry weather. We hesitated to offer a new potato, but **"Producer"** has been such a success that we consider it a valuable sort—especially for dry or light soil as it will give a good yield where other varieties would fail.

PRICES: 1 doz. eyes, postpaid, 30c; Whole Potatoes by mail, 4 lbs., postpaid, 60c; by Freight or Express, customer's expense, peck 75c; ½ bu., $1.25; bu., $2.00; 100 lbs., $3.00.

SNOW POTATO

A splendid early maturing main crop Potato that gives a good yield on poor or light soil.

This fine potato, originating in Maine—a State famous for the quality of its potatoes—has proved a wonderful producer on poor soils where other varieties would not thrive.

Given good soil and culture, **"Snow"** produces enormous crops of fine large, oval tubers, slightly flattened, having shallow eyes and netted skin. **"Snow"** is fine-grained, flaky and of excellent quality. The luxuriant vines are dark green. The potatoes grow close together with few small ones.

"Snow" is a main crop potato, but makes an early and quick growth. Try it.

PRICES: 1 doz. eyes, postpaid, 30c; 4 lbs. whole potatoes, 60c; by Freight or Express, per peck, 75c; ½ bu., $1.25; bu., $2.00; 100 lbs., $3.00.

SEED POTATOES—Continued

Hundred Fold

A splendid new main crop variety of the same general type as Uncle Sam, but surpassing that excellent variety in many ways, is a splendid dry land potato, an enormous yielder and of the finest quality, being white, dry and mealy at any stage of development. The skin is russet, which is a mark of quality.

Price, postpaid, 1 doz. eyes, 30c; 4 lbs. whole potatoes, 60c; Frt. or Exp., pk., 75c; ½ bu., $1.00; bu., $1.75; 100 lbs., $2.50.

Rural New Yorker

A shapely, smooth, shallow eyed white potato of excellent quality; a good producer.

Price, postpaid, 4 lbs. whole potatoes, 80c; Frt. or Exp., peck, 75c; ½ bu., $1.00; bu. $1.50; 100 lbs., $2.25.

Early Ohio

We offer a select stock of this popular old favorite —from Northern grown seed—that we have grown for 3 years, a true heavy yielding strain—one of the best early pink potatoes.

Price, postpaid, 1 doz. eyes, 30c; 4 lbs. whole potatoes, 60c; Frt. or Exp., pk., 75c; ½ bu., $1.00; bu., $1.75; 100 lbs., $2.50.

American Wonder

American Wonder is not only one of the best main crop potatoes, but is also one of the **earliest** potatoes grown. It is a strong grower, and great producer. Tubers white, large and uniform in size; elongated, slightly compressed, with few eyes, and is of good **quality.**

Price, postpaid, 4 lbs. whole potatoes, 60c; Frt. or Exp., peck, 75c; ½ bu., $1.00; bu., $1.50; 100 lbs., $2.25.

Carmen No. 2

A flattened oval type, white skinned, a vigorous grower, yields well and is of good quality.

Price, postpaid, 4 lbs. whole potatoes, 80c; Frt. or Exp., pk., 75c; ½ bu., $1.00; bu., $1.50 100 lbs., $2.25.

Burbank

A standard commercial variety. We can offer a splendid strain of select Burbanks, not the "run-out" stock generally seen, but the genuine article, which is a really good potato.

Price, postpaid, 4 lbs. whole potatoes, 60c; Frt. or Exp., peck, 75c; ½ bu., $1.00; bu., $1.50; 100 lbs., $2.25.

SUGGESTIONS FOR GROWING—*treatment of Seed*

YOU can grow potatoes under most average conditions of soil and care, but for the big yields of shapely tubers that pay big profits it requires soil adapted to potato growing, good seed stock properly planted, and plenty of **cultivating at the right time.** You can make your soil fit by proper rotation (clover or vetches are best) and use of necessary fertilizers.

CULTURE.—*Plow deep—8 to 10 inches—using a "jointer" to put all weeds and grass below the reach of Harrow and Cultivator. Put the soil in good tilth—disc and use leveling harrow. Plant in rows 42 inches—ten to fourteen inches in the row if rich soil and you want to keep the size down—in poorer soils plant the hills farther apart. Early potatoes can be planted very close and good yields will result. As soon as danger of frost is over, spread the seed out thin in the sun or in a light room—this keeps back the sprouts, makes them sturdy, gives vigor and vitality to the seed, and helps kill fungus.*

Cut the seed to about two eyes, planting four or five inches deep, harrowing soon after planting, and again as soon as up, and follow with a light and then a deep cultivation before the tubers begin to set. As soon as they start to form, drop away a little with your cultivator, and later on just work the surface to keep down weeds and retain moisture. **Weeds Rob the Growing Crop of Food and Moisture--and Yield no Tubers.**

Treat Your Seed Potatoes.

To prevent fungous diseases, scab, etc., dip the seed before planting, using a solution of **Corrosive Sublimate 1 part to water 1,000 parts** *soaking the potatoes for two hours, then spreading out to dry before planting.*

CAUTION.—This solution is deadly poison, and should be kept away from animals and children. Must be made in a wooden tub or barrel—never put in a metal container.

Part of 1915 *Seed Crop "Pride of Multnomah" Potatoes,* 3500 *bushels, just as they run from the field.*

Formaldehyde for Potato Scab

Soak the tubers before cutting for one hour and a half in a solution of 1 lb. (or pint) of Formaldehyde to 30 gallons of water. The potato fungus lives in the soil and on old vines; hence it is wise to keep it off your land by using Formaldehyde for your seed potatoes.

PRICE, pint bottle, 40c; 2 bottles, 75c; gal. jug, $2.50, sent by Freight or Express only, at purchaser's expense. Cannot be mailed.

RADISHES

To secure Radishes with crisp, tender flesh, grow them quickly in rich, loose soil, and gather before reaching full size. Our Radish Seed is strictly of the finest grade, being grown from carefully selected roots. Frequent planting should be made for succession, so that a supply of fresh, tender Radishes in the finest condition may be had at all times.

Early Crimson Giant

The Largest Early Scarlet Turnip-Shaped Radish

A new, early Radish, double the size of any of the turnip-shaped type, but, notwithstanding its immense size, **does not get hollow and pithy.** The flesh is a sparkling **white, solid, crisp, juicy** and of the **mildest flavor.** The shape of the bulb varies from round to almost oval, but the bright, deep crimson color of the skin remains quite constant. Excellent for both forcing and open ground.

Pkt., 5c; oz., 10c; ¼ lb., 30c; lb., $1.00

Early Scarlet Turnip

A small, round, red turnip-shaped Radish, with small top and of very quick growth; very early; rich color and crisp, tender flesh.

Pkt., 5c; oz., 10c; ¼ lb., 20c; lb., 65c

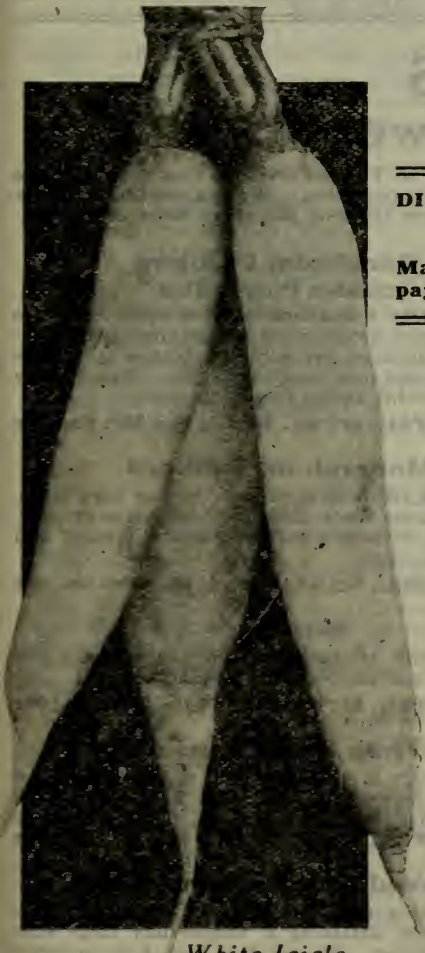
Early Scarlet Turnip, White Tipped

A beautiful variety; deep scarlet with white tip. Very early. Has a small top, and may be planted closely. Flesh crisp, tender and sweet. Cannot fail to give satisfaction as a forcing Radish.

Pkt., 5c; oz., 10c; ¼ lb., 20c; lb., 65c

Crimson Giant
Best Scarlet Turnip Radish

DIAMOND VEGETABLE FERTILIZER
Makes gardening pay. See page 60.



White Icicle
Early, Sweet and Crisp

White Icicle

This superb Radish is the finest and longest of the very early, pure white varieties. Planted in the Spring, is ready for use in twenty to twenty-five days; their long, slender form and pure, paper-white skin are most attractive when bunched for market. This Radish is not only crisp and tender when young, but also **retains these qualities until the roots attain large size;** is excellently adapted for forcing purposes or successive sowing in the open ground and gives a continuous supply of tender, crisp Radishes for the table or market throughout the season.

Pkt., 5c; oz., 10c; ¼ lb., 25c; lb., 75c

Early Long Scarlet, Short Top

This bright scarlet, small topped sort is uniformly straight, smooth, brittle and crisp, and is a standard and excellent sort for private gardens or market use.

Pkt., 5c; oz., 10c; ¼ lb., 20c; lb., 60c

Long Brightest Scarlet, White Tipped

This is the brightest and handsomest colored Scarlet Radish known. The lower third of the root is snow white; very attractive. It is extra early and the flesh is very tender. Valuable for forcing or open ground.

Pkt., 5c; oz., 10c; ¼ lb., 20c; lb., 65c

Early Snowball

A grand improvement on the White Box or White Turnip Radish which has been so popular for several years. It is handsome in shape, very early, and has but few leaves, is of a clear white color, solid, juicy, crisp, tender and unsurpassed in flavor. A good sort for forcing.

Pkt., 5c; oz., 10c; ¼ lb., 20c; lb., 65c

☞ REMEMBER our "Crispette" Lettuce for Home Gardens—Page 22.

RADISHES—Continued.

Cincinnati Market

A superior strain of long scarlet, an early, rapid grower of a deep crimson color, so clear and brittle as to be almost transparent. Keeps fresh and stands shipment—a fine market radish.

Pkt., 5c; oz., 10c; ¼ lb., 20c; lb., 65c

Improved Chartier

Roots long, tapering, and attaining a very large size. Of rapid growth; remains crisp and tender till fully grown. Color, scarlet above; shading into white at the tip. Flesh white and mild flavored.

Pkt., 5c; oz., 10c; ¼ lb., 20c; lb., 65c

French Breakfast, or Half Long

Medium size, quick growth, crisp and tender; lower end and taproot white.

Pkt., 5c; oz., 10c; ¼ lb., 20c; lb., 65c

White Strasburg

One of the best large Summer sorts. It covers a long season, as it is good when quite small. The roots are long, very white, crisp and tender.

Pkt., 5c; oz., 10c; ¼ lb., 20c; lb., 60c

Lady Finger, or White Vienna

Of rapid growth and beautiful shape. Skin and flesh snow-white; very juicy, firm, crisp and tender; the finest of Long White Radishes.

Pkt., 5c; oz., 10c; ¼ lb., 20c; lb., 60c

Winter Radishes

California Mammoth White China

This is the largest of all radishes. Roots grow ten to twelve inches long and are solid, tender and crisp. Keeps well through Winter.

Pkt., 5c; oz., 10c; ¼ lb., 20c; lb., 65c

BLACK SPANISH LONG.—Standard Winter sort; has good flavor and keeps well.

Pkt., 5c; oz., 10c; ¼ lb., 25c; lb., 75c

China Rose Winter

One of the best Fall and Winter varieties; a favorite with market gardeners; bright rose color; flesh white, firm and of superior quality.

Pkt., 5c; oz., 10c; ¼ lb., 20c; lb., 65c

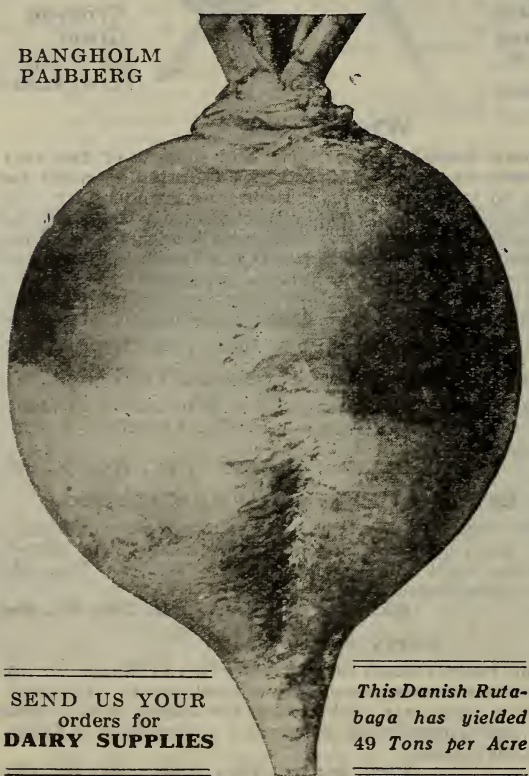
BLACK SPANISH ROUND.—Same as long, except shape.

Pkt., 5c; oz., 10c; ¼ lb., 25c; lb., 75c

TURNIPS

Ruta Baga or Swede

FOR feeding stock in Fall and Winter there is nothing superior to Turnips or Ruta Bagas, as they are much liked by all kinds of stock and serve to keep them in good condition. We can not too earnestly recommend farmers to increase their sowings largely, for we are sure the crop will prove remunerative.



BANGHOLM PAJBJERG

SEND US YOUR orders for **DAIRY SUPPLIES**

This Danish Rutabaga has yielded 49 Tons per Acre

Bangholm Pajbjerg
Danish Purple Top

This variety was awarded a first-class certificate by the Danish government for heaviest yield, having given 49 tons per acre. In shape is a little more elongated than the Globe types. This variety is recommended as the best of its class.

Pkt., 5c; oz., 10c; ¼ lb., 25c; lb., 75c

Monarch or Tankard

This is a yellow fleshed sort, having very large, tankard-shaped roots; flesh very solid, fine grained, of fine flavor; grows well out of the ground and yields large crops.

Pkt., 5c; oz., 10c; ¼ lb., 20c; lb., 60c

Skirving's

Enormously productive; flesh yellow, solid and sweet. One of the best for field culture.

Pkt., 5c; oz., 10c; ¼ lb., 20c; lb., 60c

White Sweet Russian

This variety is most excellent, either for table or stock. It grows to a very large size; flesh white, solid, of a firm texture, sweet and rich; an excellent keeper. **Pkt., 5c; oz., 10c; ¼ lb., 20c; lb., 60c**

Improved American Purple Top

The leading standard variety, being very distinct in type, attaining a wonderfully large size; immense yielder. The flesh is very firm, superior in every way, valuable alike for all purposes.

Pkt., 5c; oz., 10c; ¼ lb., 20c; lb., 60c

Cut Worm Food **Protects Tomatoes, Cabbage, Melons, Cucumbers and Other Plants — easily applied — inexpensive. Price, 1-lb. pkg., 25c.**

TURNIPS

Orange Jelly *White Milan* *P. T. White Globe*

FOR early use sow the small sorts as soon as the ground can be worked in the Spring, in drills fourteen inches apart. As the seed is very fine, it should be covered but slightly, except in very dry weather. For Fall and Winter use, sow the early kinds during July, August and September.

Early Garden Turnips

Early Purple Top Milan

This variety is ready for the table sooner after planting than any other yet introduced. Top small, erect, strap-leaved; bulb a deep purple above, white underneath; flesh white, firm and delicate.

Pkt., 5c; oz., 10c; ¼ lb., 30c; lb., $1.00

Early White Milan

Same as Purple Top Milan, but pure white, sweet and tender; best early market variety.

Pkt., 5c; oz., 10c; ¼ lb., 30c; lb., $1.00

Early White Flat Dutch

One of the very best and most universally grown. Small, erect top, round, flat; flesh, white, firm, but very tender and sweet. Of quick growth, it is soon ready for the table and keeps well.

Pkt., 5c; oz., 10c; ¼ lb., 20c; lb., 60c

Purple Top Strap Leaf

A leading white-fleshed variety, and one of the best, either for the family, market garden or field crop. It is medium size, and produces a large crop. The flesh is firm, but tender, and of a superior rich buttery flavor. A good keeper.

Pkt., 5c; oz., 10c; 2 oz., 15c; ¼ lb., 20c; lb., 65c

Early Snowball

Early round turnip, maturing in seven weeks, is of perfect form, snowy whiteness, crisp, solid and of fine flavor. **Pkt., 5c; oz., 10c; ¼ lb., 25c; lb., 75c**

Orange Jelly
Or Robertson's Golden Ball

Undoubtedly one of the most delicate and sweetest yellow-fleshed turnips yet introduced. Not of large size, but firm, hard and most excellent flavor. Keeps well and is superior as a table variety. It is extensively used by market gardeners.

Pkt., 5c; oz., 10c; ¼ lb., 25c; lb., 75c

Main Crop Turnips

Danish Bortfelder

This is a superior Danish variety introduced as an improvement on Cow Horn, being a heavier yielder and growing straight. It is also sweet and fine-grained, being a good table Turnip. Shape is long and tapering, but grows well up out of the ground. Sow in Spring for Summer, and in mid-Summer for Winter feeding.

Pkt., 5c; oz., 10c; ¼ lb., 25c; lb., 75c

Cowhorn

Sometimes called Long White. Slightly crooked. Pure white except a little shade of green at the top. Grows half out of the ground and is of very rapid growth. is delicate and well flavored. Has proved itself one of the best stock turnips ever introduced in Oregon, as it is an immense yielder.

Pkt., 5c; oz., 10c; ¼ lb., 20c; lb., 65c

Pomeranian White Globe

One of the most productive kinds, and in good, rich soil, roots will frequently grow to 12 pounds in weight. It is of perfect globe shape; skin white and smooth; leaves dark green and of strong growth.

Pkt., 5c; oz., 10c; ¼ lb., 20c; lb., 65c

Purple Top White Globe

A large, globe-shaped variety; purple above the ground. It is handsome and of excellent quality, and recommended both for the family garden and field crop.

Pkt., 5c; oz., 10c; ¼ lb., 20c; lb., 65c

Large White Norfolk

A white variety, usually attaining a very large size. Extensively grown for stock feeding. The leaves are also used for greens. It is hardy and may remain in the ground all Winter. Yields very large crop. **Pkt., 5c; oz., 10c; ¼ lb., 20c; lb., 60c**

White Egg

Is perfectly smooth, of a pure, clear white, growing half out of the ground, and at times to the size of a Ruta Baga, being a very choice kind for table use; of excellent flavor; sweet and mild. Pulls clean from the ground; thin, snow-white skin.

Pkt., 5c; oz., 10c; ¼ lb., 20c; lb., 65c

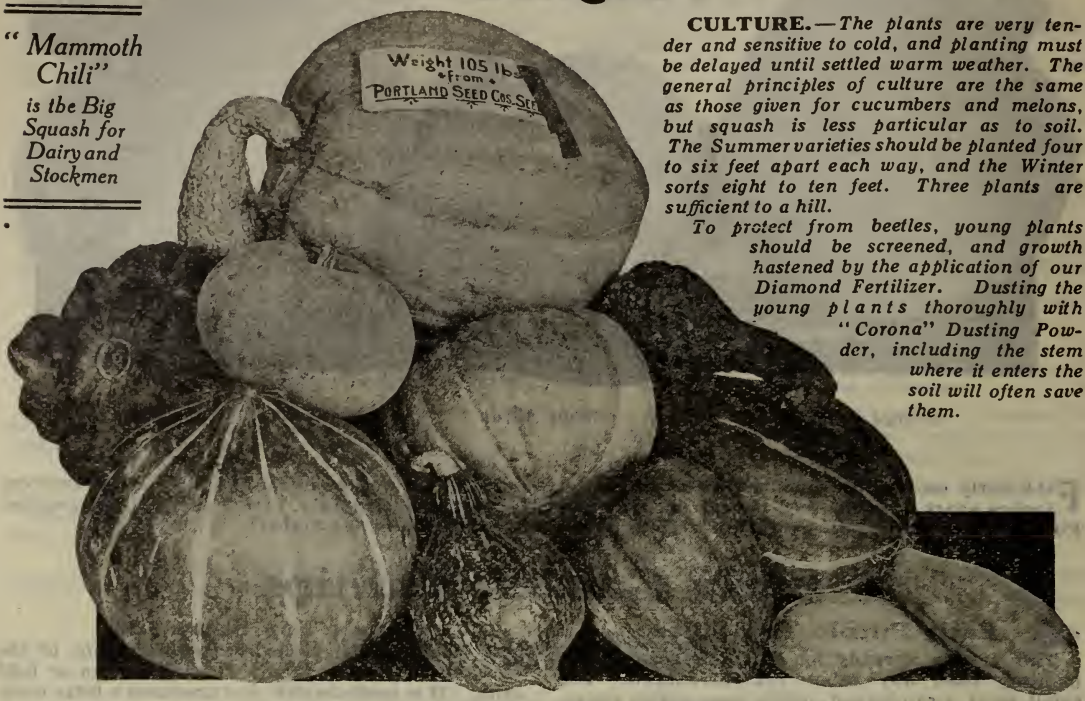
Yellow Aberdeen

Round, medium size; light yellow. Produces a large crop; is hardy and keeps well; flesh very firm but tender and sweet. A great favorite with the dairymen.

Pkt., 5c; oz., 10c; 2 oz., 15c; ¼ lb., 20c; lb., 65c

"Diamond Quality" SQUASH

"Mammoth Chili" is the Big Squash for Dairy and Stockmen



CULTURE.—*The plants are very tender and sensitive to cold, and planting must be delayed until settled warm weather. The general principles of culture are the same as those given for cucumbers and melons, but squash is less particular as to soil. The Summer varieties should be planted four to six feet apart each way, and the Winter sorts eight to ten feet. Three plants are sufficient to a hill.*

To protect from beetles, young plants should be screened, and growth hastened by the application of our Diamond Fertilizer. Dusting the young plants thoroughly with "Corona" Dusting Powder, including the stem where it enters the soil will often save them.

Summer Varieties

Mammoth White Bush Scallop

The best Summer sort for the market; very productive and of good size.

Pkt., 5c; oz., 10c; ¼ lb., 25c; lb., 75c

Early Yellow Mammoth Bush Scallop

An early, flat, scallop-shaped variety; color yellow; flesh pale yellow and well flavored; very productive. **Pkt., 5c; oz., 10c; ¼ lb., 25c; lb., 75c**

Mammoth Summer Crookneck

Early, prolific, solid, curved neck; skin yellow, thin, hard and warty; flesh tender and of good quality. Twice as large as the ordinary Crookneck and several days earlier.

Pkt., 5c; oz., 10c; ¼ lb., 25c; lb., 75c

White Summer Crookneck

Similar to the Yellow Crookneck, but of a beautiful ivory white and unsurpassed quality.

Pkt., 5c; oz., 10c; ¼ lb., 25c; lb., 75c

English Vegetable Marrow

Oblong, dull yellow skin, very prolific and of finest table quality.

Pkt., 5c; oz., 10c; ¼ lb., 25c; lb., 75c

Fordhook

Oblong in shape, eight to ten inches long, with thin, yellowish skin, slightly ridged. One of the finest Summer Squashes, and if left to ripen makes a splendid Winter sort.

Pkt., 5c; oz., 10c; ¼ lb., 25c; lb.,75c

Winter Varieties

True Hubbard

The best seller and most popular variety on our list. Rind dark green, warty and very hard. Flesh light orange, very dry, sweet and rich flavored. Has no superior. Keeps perfectly through the Winter. **Pkt., 5c; oz., 10c; ¼ lb., 25c; lb., 85c**

New Delicious

This new Fall and Winter squash resembles the old Hubbard; average weight is between five and ten pounds. Seed cavity small; flesh exceedingly thick, compact, fine grained; color, golden orange. The flesh is meaty, granulated, tender and almost of mealy dryness, cooking sweet and rich, whether steamed, baked, boiled or made into pies.

Pkt., 5c; oz., 10c; ¼ lb., 25c; lb., 85c

Boston Marrow

Skin yellowish, very thin; flesh dry and fine grained; of unsurpassed flavor.

Pkt., 5c; oz., 10c; ¼ lb., 20c; lb., 65c

Golden Hubbard

The same in size, shape and quality as the well known Hubbard Squash, except that it is a bright red or golden color, and somewhat earlier. It is also a long keeper. One of the very best Fall and Winter sorts yet introduced. Maturing before the frosts; is vigorous and wonderfully productive.

Pkt., 5c; oz., 10c; ¼ lb., 35c; lb., $1.00

Mammoth Chili

The largest of all Squashes, growing to an enormous size, often weighing over 200 pounds, while its rich, fine flavored flesh insures its value for all purposes. Its size makes it valuable for stock feeding. **Pkt., 5c; oz., 10c; ¼ lb., 35c; lb., $1.00**

Sibley, or Pike's Peak

Shell smooth, thin and of a pale green color; the flesh is thick, solid, deep orange color; very dry, fine grained with a delicate flavor.

Pkt., 5c; oz., 10c; ¼ lb., 30c; lb., 90c

REMEMBER—"PRIDE OF MULTNOMAH" IS THE MOST PROFITABLE MAIN CROP POTATO FOR YOU TO GROW.

Spinach

SPINACH

This is an important gardener's crop, of easy culture. For Spring and Summer use, sow either broadcast or in drills one foot apart and one inch deep, as early as the ground can be worked, and every two weeks for a succession.

Prices are Uniform on All Varieties

Pkt., 5c; oz., 10c; ¼ lb., 20c; lb., 50c

Improved Thick Leaved. Variety which grows very rapidly, forming a cluster of large, very thick, slightly savoyed leaves of fine color, and quality when cooked. Best for market gardeners.

Savoy Leaved. Very early; of upright growth; leaves pointed. Plant in the Autumn for Spring use; grows quickly.

Victoria. Leaves large, tender and of good quality; good market sort.

Prickly Winter. Hardiest variety; may be sown in the Fall; seed prickly; leaves long, pointed, thick and succulent.

Long Standing. An improved variety for general use; slow going to seed.

For New Spinach Beet "Lucullus" See Page 8

Salsify or Vegetable Oyster

SALSIFY or Vegetable Oyster

Salsify is a nutritious and wholesome vegetable, having the appearance of a small parsnip; in flavor closely resembling oysters, for which it is, in that respect, a good substitute. It is rapidly coming into more general use.

CULTURE.—*Sow early in Spring, in drills a foot apart, and when two or three inches high thin out to three or four inches. Its general culture is the same as that recommended for carrots. The roots are perfectly hardy and may remain in the ground during Winter, or may be stored in dry earth or sand.*

MAMMOTH SANDWICH ISLAND.—The leading variety; produces a large crop of straight, smooth roots.

Pkt., 5c; oz., 10c; ¼ lb., 35c; lb., $1.25

Tree Seed—For Nurserymen

Growers wanting large quantities should give us their orders early. Prices quoted on request. Single pound prices are by mail, postpaid.

APPLE SEED--French Crab. **Oz., 10c; ¼ lb., 25c; lb., 70c**

CHERRY PITS--Mazzard. **¼ lb., 15c; lb., 50c**

Mahaleb. **Oz., 10c; ¼ lb., 30c; lb., 95c**

PEACH PITS--For Nursery Stock. **Lb., 20c; 100 lbs., $2.15**

QUINCE SEED. **Oz., 20c; ¼ lb., 60c; lb., $2.10**

LOCUST--Yellow or Black. **Oz., 10c; ¼ lb., 20c; lb., 60c**

Honey. **Oz., 10c; ¼ lb., 25c**

PEAR SEED--French. **Oz., 15c; ¼ lb., 50c; lb., $1.60**

Japanese—The best imported for nursery stocks. **Oz., 30c; ¼ lb., 65c; lb., $2.35**

WALNUT, ENGLISH--Imported and Domestic.—We offer new crop, our own direct importation from the best French growers; also Oregon grown from grafted stock. In the most desirable varieties: **Mayette** and **Franquette.** Write for prices on large orders. **2c each; $1.75 per 100 nuts**

☞ Weight packed, 3 lbs. per 100. Add postage at zone rate.

"Diamond Quality" Nursery Stocks are Vigorous, Healthy and True to Name Ask for our 64-page Catalog.

TOMATOES

THE NEWER types of hardy, prolific Tomatoes are better adapted to the cool Coast climate than the older sorts; and splendid crops are now being grown where heretofore it was thought Tomatoes would not thrive. A good plan is to try several varieties and find which is best suited to your special conditions.

CULTURE.—*Sow early in hotbeds, and as soon as they have four leaves transplant into shallow boxes. Harden off, and set out as soon as danger of frost is past. An ounce of seed will produce 3,000 to 4,000 plants.*

If blight appears use "Bordeaux" but it is better to use as a preventative before blight strikes the plant, and as a control measure for flea beetles, spraying the under side of foliage.

Early Jewel

Chalk's Early Jewel

Large, bright red, smooth, round fruits, very deep and colored evenly up to the stem; very solid, almost seedless and of the finest flavor.

Vines are vigorous, not subject to blight, and yield fully equal to or better than Earliana.

We recommend Chalk's Early Jewel as the very best early Tomato for either market or home gardens, as it has given us uniformly better satisfaction under the varying conditions of soil and climate in the Northwest.

Pkt., 10c; oz., 20c; ¼ lb., 60c

Spark's Earliana

The Earliest Tomato

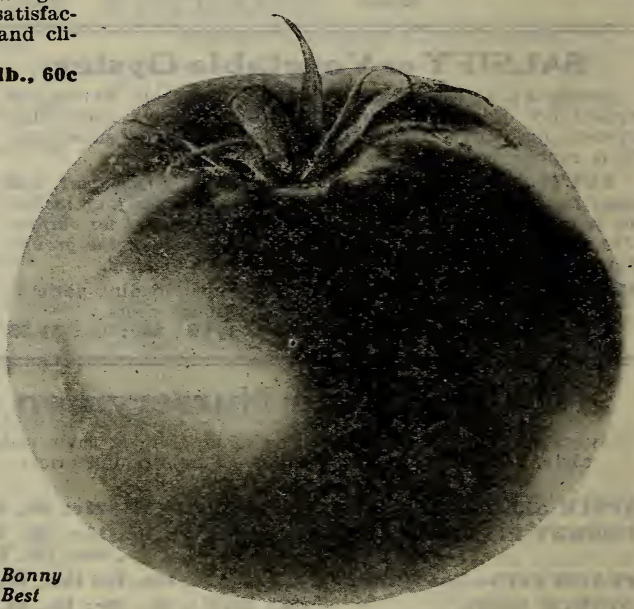
Of large, uniform size and beautiful red color. Ripens thoroughly all over, the stem end coloring up perfectly. Almost seedless and very solid. A most vigorous grower and heavy bearer, continuing until frost. Succeeds everywhere, and especially recommended for this Coast.

Spark's Earliana is as near seedless as any tomato, giving but 12 to 15 pounds of seed to the acre. For this reason the genuine seed can never be sold at a low price. **Pkt., 5c; oz., 15c; ¼ lb., 50c**

Bonny Best

Bonny Best has given splendid results wherever tried and being early, hardy and very productive can be recommended for outside planting wherever tomatoes can be grown. It is also a good forcing variety. Fruit smooth, round, slightly flattened, solid and of a bright scarlet. Quality excellent.

Pkt., 10c; oz., 30c; ¼ lb., $1.00



Bonny Best

New—Carter's Sunrise

A very early English variety of fine flavor and healthy, vigorous growth, with solid flesh and few seeds; very even, smooth and shapely. Color, bright, rich scarlet. Is also one of the best forcing varieties. **Pkt., 25c**

Comet—Forcing

The very best forcing variety and a general favorits with greenhouse growers. Color is a beautiful scarlet; fruits are of good size, very smooth and uniform. We offer a select strain from inside stock.

Pkt., 25c

Ponderosa

The largest Tomato, fruits are solid and of a purplish red color, sweet and of good quality.

Pkt., 10c; oz., 40c; ¼ lb., $1.00; lb., $3.00

Livingston Globe

One of the Best Early Tomatoes
Hardy and Blight Proof

Fruits are of large, even size; vary early; ripen clear through and are always smooth, firm and round; with solid meat and few seeds. Color is a beautiful glossy, rose-tinged purple; very productive. Livingston's Globe is of delicious table quality and will keep longer than any other Tomato. Is also an excellent forcing variety.

Pkt., 10c; oz., 25c; ¼ lb., 75c

Tomato Plants

STANDARD VARIETIES FOR SEASONABLE DELIVERY—FINE, HEALTHY, TRANSPLANTED AND POT GROWN PLANTS—Safely Packed and Shipped to Any Point in the Northwest. *See Plant Dept*

TOMATOES—Continued

New Stone

This new variety has obtained great popularity with canners, growers and market gardeners everywhere. Its solidity and carrying qualities are remarkable. Its color a desirable red. In shape, perfectly smooth and thicker from stem to blossom end than most varieties, making it very **handsome and salable.** All speak in highest terms of its beautiful color, its wonderful yielding properties, its unequaled firmness.

Pkt., 5c; oz., 15c; ¼ lb., 50c

Atlantic Prize

In point of earliness, this undoubtedly takes the lead. In size, shape and color it compares favorably with later sorts. Color, bright red.

Pkt., 5c; oz., 15c; ¼ lb., 50c

Quarter Century

A grand, new dwarf tomato. The fruit is large and heavy and of superior flavor; color, deep red, Fine for home garden.

Pkt., 5c; oz., 25c; ¼ lb., 85c

Livingston's New Coreless

The most perfect shape canning variety ever produced. Large size, globe shaped, full at stem end, bright red, a strong grower and big cropper.

It is immensely productive, clusters of four to seven fruits are produced at six to eight inches apart along the stem. All of the fruits are of marketable size, and many of them are quite large, twelve to fifteen ounces. Always free from green core; ripens all over and through and right up under the stem, all at once. A grand, good slicing variety; the seed cells being surrounded by bright red, heavy, meaty and delicious flesh, which is slightly acid.

Pkt., 10c; oz., 25c; ¼ lb., 75c

Livingston's Perfection

One of the best medium early, round, uniformly smooth; vines very productive; fruit deep scarlet, firm and of excellent quality. Vines continue long in bearing. **Pkt., 5c; oz., 20c; ¼ lb., 55c**

Early Michigan

An extremely smooth and perfectly shaped tomato; very early; vines strong and vigorous.

Pkt., 5c; oz., 15c; ¼ lb., 50c

Well Known Standard Varieties

	Pkt.	Oz.	¼ lb.
ACME. The well known, standard, bright pink Tomato..	5c	15c	$0.50
DWARF CHAMPION.—Dwarf, upright growth; smooth, purple fruit.....	5c	25c	75c
GOLDEN QUEEN.—This is a first-class, large, smooth, pure yellow tomato.....	5c	25c	75c
LIVINGSTON'S BEAUTY.—Large; good quality; deep red in color.....	5c	20c	55c
LIVINGSTON'S FAVORITE.—Excellent for general crop; bears heavily.....	5c	20c	55c

Yellow Pear Tomato

Yellow Pear

A small pear-shaped tomato, borne in great profusion, vine literally covered with large clusters of fine, solid fruits; excellent for preserving, and for use in salads and cooking is superior, as flesh is not watery. Very hardy. To this class belong **Yellow Plum** and **Red Cherry.** All same price.

Pkt., 5c; oz., 25c; ¼ lb., 75c

FERTILIZERS

Are not an expense. They are a safe investment, sure to return many times their cost.

Ask for our free book,

"Fertilizers"

Ground Cherry or Husk Tomato

Ground Cherry, or Husk Tomato

Grows to great perfection under ordinary culture, yielding abundantly; very much prized for preserving; should be in every garden.

Pkt., 5c; oz., 30c; ¼ lb., $1.00

Tomato Culture—by Littooy

Post Paid 25c.

GOOD GARDENERS—GOOD SEEDS

Gentlemen:

Perhaps it may interest you to know that at the East Kootenay Fall Fair held in Cranbrook, B. C., September 8th and 9th, we took eleven prizes for exhibits in vegetables grown from your seeds, which is very creditable in competing against older and more experienced growers here, and speaks volumes for your seeds. We will certainly boost you all we can.

Yours very truly,
MAISEY BROS.

Tobacco

Sow the seed thinly in beds, as early as they can be well prepared. Cultivate thoroughly, transplanting when six inches high to rows four feet apart each way.

Connecticut Seed Leaf

Hardy, and the best adapted to cool localities, and for general use.

Pkt., 5c; oz., 20c; 2 oz., 35c; ¼ lb., 60c; lb., $2.00

Havana

Of fine texture and delicate flavor.

Pkt., 5c; oz., 25c; ¼ lb., 75c

FIELD AND FARM SEEDS

THERE are many varieties of grasses and forage plants offered by Eastern seedsmen (often under new names) that will not give profitable crops in our climate, and to avoid disappointment, we refer you to the following list, which has been carefully selected and contains the most desirable varieties for general and special purposes.

A careful reading of the following pages will give you much valuable information that has required years of observation and experimenting to obtain.

IMPORTANT, Read Carefully

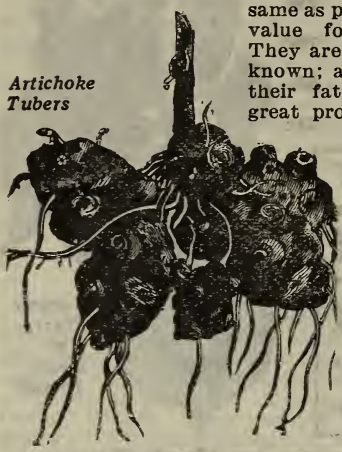
Clover, Grass and Field Seeds are subject to market changes, therefore we cannot print prices good for any length of time. When ready to buy, write us for special prices, stating quantity wanted; or send in your order at catalog prices. **We guarantee that we will give you full value for the money sent,** whether the price at the time you order be higher or lower, or if the difference is very great we will notify you before shipment. **No premiums on Grass and Field Seeds.**

Single pound prices include postage. If ordering by freight or express deduct 10c per pound; 100-pound prices subject to market changes. Seed to cover amount remitted always sent unless otherwise ordered. **Write for prices on large quantities.**

YOU WILL ALWAYS GET YOUR MONEY'S WORTH.

Artichokes

There is an unlimited market for Hogs and Artichokes are the cheapest and best feed. They never fail. They are also valuable to dairymen, being cheap, and good milk producers.



Artichoke Tubers

Planted and cultivated same as potatoes. Of great value for feeding stock. They are the best hog feed known; are remarkable for their fattening properties, great productiveness (over one thousand bushels having been raised on one acre) and ease with which they can be grown. They need not be dug. Turn the hogs into the field, and they will help themselves by rooting. One acre will keep from twenty to thirty hogs in condition from October until April, except when the ground is frozen too hard for them to root. They are said to be a preventive of cholera, and other hog diseases, and are also highly recommended for milch cows, increasing the yield of milk and at the same time improving their condition. Plant ten bushels per acre early in the Spring.

Note.—Tubers on hand from January to May.

Per lb., postpaid, 15c; 100 lbs., $2.00

Cow or Thousand Head Kale

Plants in Season

The great demand for this wonderful forage plant proves it to be the most valuable green feed for Pacific Coast dairy and stockmen; endorsed by Agricultural Colleges and Government Stations. Cow Kale should be grown in the same manner as cabbage. Make the rows 4 feet, plants 3 feet apart in the row. Can be set as late as July. Write for full information on Planting and Feeding.

Postpaid, oz., 10c; ¼ lb., 20c; lb., 60c

Flax Seed

We have a splendid lot of selected recleaned Western-grown Flax, new crop, large plump seed.

Per lb., postpaid, 20c; 100 lbs., $6.00

BUCKWHEAT

Buckwheat is a valuable crop that can be easily grown wherever wheat will grow, producing a good yield even on light or poor soil and under favorable conditions is very profitable, being in big demand for milling—and is also the best "Bee pasture."

Sow 36 lbs. per acre in drills, 48 lbs. broadcast.

We recommend the Japanese variety.

Common, lb., postpaid, 20c; 100 lbs., $4.50

SILVER HULL.—Of a light gray color, rounder than the common; has a thin husk; matures earlier and yields heavily. An excellent milling variety.

Per lb., postpaid, 20c; 100 lbs., $4.50

JAPANESE.—Ripens early—is hardy and yields the largest crops. The grains are extra large, dark brown, very thin hulled and makes the highest grade of flour. Good seed stock has been very scarce for several seasons, but we now have a fine lot which we can offer at a very low price.

Per lb., postpaid, 20c; 100 lbs., $4.50

Typical Plant of Cow Kale

A quarter of a lb. of seed will produce enough Kale plants for one acre.

Write for Prices on 100-Pound and Ton Lots

BARLEY

BARLEY is a shallow feeder, the roots growing near the surface, and requires a rich, mellow soil. Barley responds readily to good tillage and any extra work with the disc and fine tooth harrow will be amply repaid. Do not try to grow upon poor, sandy or wornout soils, or where the ground is not in good condition or well drained. In rotation, Barley follows Corn, Peas, Potatoes, or any cultivated crop, and is the best nurse crop for starting clovers or mixed grasses. Should be planted late after ground is warm and Spring weather settled. Plant two bushels per acre. Crimson Clover planted in the Fall and plowed under after blooming in the Spring, leaves the soil in fine condition for barley.

1915 *Seed Field of Beardless Barley—a fine stand with very few bearded heads. Notwithstanding the dry season, this field averaged 65 bushels per acre.*

New—"Oderbrucker" Barley

This is a Pedigreed strain of 6-row barley, selected and bred by the University of Wisconsin, and is considered the earliest maturing, most prolific of all the barleys. Has a stiff straw, is rust resistant, and owing to its high protein content is a very superior feeding sort. This is the variety that was secured at great expense by the Oregon and Washington Railroad Co. for introduction in their territory. We offer the genuine stock of our own growing.

Price: lb., postpaid, 15c; Frt. or Exp., 10 lbs., 35c; 100 lbs., $2.50.

White Hulless or Bald Barley

White Hulless, or Bald Barley.—A very Early Spring variety—beardless, and of high feeding value, said to exceed corn as a pork producer. Can be fed to all live stock—especially valuable used in a mixed ration. Grain plump, heavy and when thresned is hulless like wheat. A heavy cropper. When grown and cut for hay it produces a magnificent fodder, which is very rich and almost equal to a grain feed. Much relished by horses and stock of all kinds. Culture same as Common Barley.

Per lb., postpaid, 15c; 100 lbs., $2.75

Common Barley

We always aim to have a nice, clean stock of good Seed Barley on hand at all times. This is the common 6-row bearded type.

Per lb., postpaid, 15c; 100 lbs., $2.00

Beardless Barley

See Cut

Beardless.—The earliest barley known. The straw is about the height of the Common Barley, but better, and will stand up on any land; last season's seed crops averaged 65 bushels per acre, although the season was a dry unfavorable one. Sow as early as you can; frost does not hurt it. Many farmers will not grow Barley on account of the long, harsh beards which are so disagreeable in threshing although it is a profitable crop. This is as nearly beardless as seems possible to obtain, as beardless barleys show a tendency to produce a small percentage of bearded heads; it is about as easy to grow and handle as oats, and is the most Popular Barley grown.

Per lb., postpaid, 15c; 100 lbs., $2.25

Black Hulless Barley—Bearded

Best of grains for feeding or fattening stock Greater food value than corn.

Black Hulless Barley will thrive on the dry Alkali soil where no other grain will grow. Sow in the Fall or Spring as late as June 15, 75 to 100 lbs. per acre. Will yield as high as 75 bushels to the acre, weighing about 70 lbs. to the measured bushel; does not shatter or shell out easily.

When planted in the Fall its abnormal stooling habit and wide succulent leaves make it ideal for late Fal lpasture; yielding a full crop the next season. Stock prefer and thrive on it.

Per lb., postpaid, 15c; 100 lbs., $3.00

A "CLIPPER" Grain Cleaner improves the quality and increases the yield of any grain crop. When you buy a fanning mill BE SURE YOU GET A "CLIPPER." The mill with the "VERTICAL BLAST" Special Catalog and Full Information on Request.

See Front Cover illustration of our Premium Yellow Dent.

THE 1915 Corn Crop in the Northwest has been a splendid one, again demonstrating that Corn can be grown here successfully and profitably, and there can no longer be any doubt as to its value, for it is rapidly becoming one of our leading grain and fodder crops.

Our own seed crops have been the largest and best matured we have ever grown, and we can safely say that the varieties offered, being acclimated, will be found right for the purposes and conditions for which they are listed.

CULTURE.—*Thorough preparation of the soil is necessary for best results, methods of culture being determined by the different conditions of soil, climate, moisture and previous crops. The ideal soil is a deep warm one with a little sand, well drained and with sufficient humus to hold the moisture.*

Deep plowing is always necessary for best results, and the heavy soils on the West side of the Cascades will give best results from Fall plowing, repeating in the Spring before seeding time. A liberal amount of stable manure and thorough tillage will help to offset the cold nights. For best results when planted for grain, plant in hills 42 inches apart, allowing two stalks to the hill. For fodder or silo, three stalks, if the ground is rich.

For East of the Cascade Mountains—quoting "Farmer Smith"—"Where rainfall exceeds 12 inches and Corn is to follow Wheat, roll the stubble with corrugated roller right after harvest; then after first heavy rains, disc crossways of the rolling. If open weather, plow or disc thirty days later, allowing to lay in the rough until Spring. Ten loads of stable manure put on during the Winter or Fall will prove helpful. In the Spring when ground can be worked, disc and harrow every two weeks until May 1st, then plow deep, discing every day's plowing and harrow, roll or clod-crush to a fine well-packed surface. List 6 inches deep in 42 inch rows, kernels 12 to 14 inches apart in the rows. If Lister is not available, plant at bottom of 6 inch furrow made with a stubble plow. Five days after planting, harrow with slanting spike tooth harrow repeating every week until Corn is 4 to 6 inches high, then continue cultivating until in tassel."

Premium Yellow Dent Corn

Grown in Washington by Careful Reselection.

Premium Yellow Dent is a cross of Yellow Flint and a big early Yellow Dent Corn, combining the earliness and hardiness of the Flint with the good qualities, large ear and vigor of the Dent. The ears are very large, often two and three on a stalk, and the stalk grows large with luxuriant foliage, making a splendid fodder or silo corn; but its great value lies in the grain production, the big yellow ears maturing early and curing up hard and dry. Premium Yellow Dent has been grown in Oregon and Washington for many years and is specially suited to our climate.

Price: 1 lb., 10c; 10 lbs., 65c

Pride of The North Yellow Dent

Washington Grown

See Cut

PRIDE of the North has long been the standard Corn recommended by the Agricultural Stations as the best Yellow Dent for Eastern Oregon, Washington and Idaho, and our Western-grown seed has given splendid results whenever conditions have been at all favorable, maturing early and yielding heavily, the foliage being luxuriant and of medium height. "Pride of the North" is specially recommended for silo. The ears are large and well filled and of a beautiful golden color.

Washington Grown, 1 lb., 15c; 10 lbs., 80c

Northern Grown, 1 lb., 10c; 10 lbs., 60c

Pride of the North

Minnesota No. 13 Yellow Dent

A variety of great promise, being the earliest of the early Yellow Dent corns and reported to be the heaviest yielding. Producing splendid large ears, closely filled from end to end with bright yellow kernels. Has rather a thick cob and the shelled grains have a tendency to irregularity. "Minnesota No. 13" will average 7 feet high and being a rapid, vigorous grower, with heavy foliage, makes a fine fodder corn, and is specially recommended for ensilage west of the Mountains. Will mature in 90 days under favorable conditions.

1 lb., 15c; 10 lbs., 80c

Minnesota King (Dent.)—Oregon Grown

Smallest cob and largest grain. The ears are uniformly well filled out. Makes more shelled corn to a given bulk of ears than any other variety. Golden yellow and a good yielder, being a safe corn to plant west of the Cascade Mountains and in Eastern Oregon and Washington below 2,600 feet. Use flint varieties above that altitude.

Oregon Grown, 1 lb., 15c; 10 lbs., 80c

Northern Grown Seed, 1 lb., 10c; 10 lbs., 65c

Wisconsin White Dent

"Wisconsin White Dent" is a large handsome White Dent, extremely early and matures perfectly, and is the best White Dent Corn for Oregon and Washington. **1 lb., 10c; 10 lbs., 60c**

Australian White Flint

A growing test of three seasons has demonstrated the adaptability of this valuable variety to Northwestern conditions. It is earlier than the well-known "Eight-Row Canada," and is to be preferred on account of its color, productiveness and very early ripening. **1 lb., 10c; 10 lbs., 60c**

Champion White Pearl

A large, White Dent variety; very popular with our dairymen on account of the great amount of green feed it makes. **1 lb., 10c; 10 lbs., 60c**

75 bushels per acre good matured corn

Gentlemen: Latourell Falls, Ore.

In spite of the very dry season, I had great success with the Yellow Dent and Oregon Evergreen Sweet Corn. The *Dent Corn yielded about 75 bushels per acre of good sound, matured* corn. I used the *Oregon Evergreen* for green fodder for cows and hogs. It yielded at the rate of more than 20 *tons of green feed per acre in spite of a 75-day drought.* It is a vigorous grower and very succulent. Yours truly,

P. O. DE MOSS.

Well Known and Standard Varieties

ALL SORTS OF FIELD CORN 10c PER PACKAGE; PRICES PER 100 POUNDS ON REQUEST

	Per lb.	Per 10 lbs.
EARLY CANADA.—(Flint.) An eight-rowed Yellow Flint Corn; early and very productive	10c	$0.60
KING PHILIP.—An early Red Flint Corn; well acclimated and well known	10c	.60
WHITE RICE.—Pop Corn. Best variety for popping corn	10c	.75

CLOVER and ALFALFA SEEDS

Field of Red Clover

Alfalfa or Lucerne Clover

ALFALFA should be cut just before coming into bloom. The hay is especially valuable for dairy cows. As soon as cut it immediately commences to grow, and during the hottest and driest weather, when other grasses are parched and withered, it remains fresh and green and grows as rapidly as ever. On the low lands it is not an unusual thing to harvest five or six crops of hay from the same field in one season without irrigation, and the same result is obtained on high, dry lands where irrigation is resorted to. It will not succeed on hard clayey soils. Its roots, in seeking moisture, penetrate to incredible depths. The seed should be sown in the Spring, after danger from freezing the young plants is over, or in the Fall, early enough to give it a good stand before frost.

Per lb., postpaid, 30c

Dry Land Alfalfa

This new Dry Land Alfalfa will produce large, profitable crops of hay and excellent pasture on the high, dry lands of Eastern Oregon, Washington, Idaho and Utah. Dry Land Alfalfa is especially reommended for the hills and plateaux where irrigation is impossible. It comes from the **highest, drlest alfalfa sectlons,** and is very superior seed.

Per lb., postpaid, 35c

Turkestan Alfalfa

Will produce a luxuriant growth in the driest and hottest sections, without irrigation. It is perfectly hardy and will stand extreme cold in Winter without harm. It yields a very heavy and rich crop of hay and makes a permanent pasture. We have the genuine imported seed.

Per lb., postpaid, 35c

Write for prices on 100 lbs. or ton lots. They are always subject to market changes. *See page 44*
Single pound prices postpaid, for larger lots add postage at zone rate.

Clovers

White Dutch Clover

(Trifolium Repens.)

A small variety, having a white blossom. Of a vining nature, spreading rapidly. Superior for pasture and unsurpassed for the production of honey. It also makes a beautiful lawn when mixed with Blue Grass.

Choice Seed, per lb., 75c, postpaid; 10 lbs., $6.50
Fancy Seed, per lb., 80c, postpaid; 10 lbs., $7.00

Red Clover

(Trifolium Pratense.)

The standard Clover for all purposes. Hardy and succeeds well on any good soil. Makes superior hay—especially mixed with Timothy—either for dairy cows or for general use.

Per lb., 35c, postpaid
Fancy

Mammoth Red Clover

Grows very large and is used almost exclusively for plowing under for manure.

Per lb., 35c, postpaid

Bokhara Sweet or Honey Clover

(Melilotus Alba.)

A rapid-growing, white-flowered sort; excellent for bees. Sow 10 pounds per acre.

Per lb., postpaid, 35c

Crimson or Scarlet Clover

(Trifolium Incarnatum.)

Highly recommended for pasture and fertilizing purposes. It is a thrifty annual, growing from twenty to thirty inches high. It germinates quickly, grows rapidly, and stools abundantly. Cut for hay when in full bloom. Planted in the Fall can be plowed under after blooming in the Spring and be followed with barley or potatoes.

Per lb., postpaid, 30c

Alsike or Swedish Clover

(Trifolium Hybridum.)

A perfectly hardy perennial variety which is rapidly growing in popular favor. Excellent for hay and pasture. Valuable for bees. Resists both drought and excessive moisture. The hay of this variety is greatly preferred by some to that of Red Clover, for the reason that it is generally finer, brighter and not so dusty, making it better for horses.

Per lb., postpaid, 35c
Fancy

Esparsette or Sainfoin

(Onobrychis Sativa.)

A deep rooting, perennial legume, extensively cultivated in dry, calcareous soils, which are too barren for Clover or Alfalfa. Sow 50 pounds per acre.

Per lb., postpaid, 30c

GRASS SEEDS Are Sold at Lowest Market Price and No Premiums Can Be Given

FERTILIZE WITH AIR!

RESTORE THE NITROGEN to your worn out soil and inoculate your new ground with fresh, virile, nitrogen-fixing bacteria. *YOU CAN DO IT WITH*

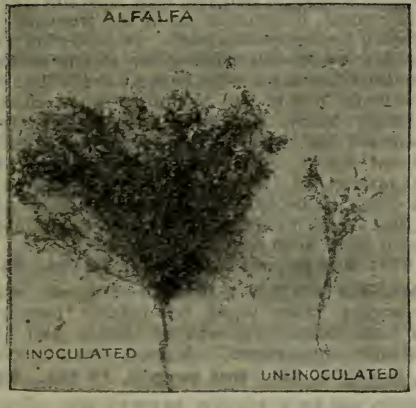
FARMOGERM

High-Bred, Nitrogen-Fixing Bacteria

To insure a Stand—Increase the Yield—Build up your Soil—always inoculate

CLOVERS ALFALFA
VETCHES PEAS BEANS
SOJA BEANS COW PEAS
with **FARMOGERM**

Easily applied—just sprinkle the seed before planting.



An eminent authority states, "I would as soon think of preparing an alfalfa field without seed as to sow the seed without inoculation." (See Farmers' Bulletin No. 257 U. S. Dept. of Agriculture.)

☛ *NITROGEN* is the most *important* and *expensive* plant food. The *air* is *four-fifths nitrogen*—the soil is full of air—but plants cannot absorb it *without the aid of nitrogen gathering bacteria.*

FARMOGERM makes this vast storehouse of nitrogen quickly available. *A one-acre packet costing $2.00 used on a leguminous crop will gather and store nitrogen equivalent to 1000 pounds of nitrate of soda* and at the same time greatly increase the growing crop.

This Bottle contains sufficient Nitrogen-fixing Bacteria to inoculate the SEED for ONE ACRE

FREE—Beautiful illustrated magazine The "LEGUME GROWER" tells all about inoculation and its wonderful results. ASK FOR IT

☛ When You Order Be Sure to state just what you intend to inoculate.

FARMOGERM is prepared for Alfalfa, all Clovers, Canada Field Peas, Cow Peas, Garden Peas and Beans, Soja Beans, Vetches and Sweet Peas.

PRICES—Postpaid—**Garden Size, ¼ acre, 50c; 1 acre, $2.00; 5 acres, $6.00**
Special Sweet Pea, trial size 25c; Regular size 50c.

☛ DO NOT Sow Inoculated Seed in Sour Soil—
Keep Cultures away from direct sunlight when preparing and sowing

DIAMOND QUALITY GRASS SEEDS are the choicest new crop seeds, recleaned and tested for purity and germination, and only those stocks that grade above the established standards are offered to our customers.

Our **Special Mixtures** have been carefully worked out by the tests and observations of practical experts familiar with the requirements and conditions to be met, and will give the best results possible to obtain for the uses for which they are recommended.

"Diamond" Fancy Lawn Mixture

TO have a good lawn the soil must be fine and rich, and well leveled. Then the best seed obtainable should be used. Plant any time from September until late Spring, depending upon the weather and soil conditions. Raking in the seed is advisable, and rolling greatly improves the turf. In watering your lawn soak it deeply and not too often, as light watering every day brings the roots close to the surface, where they quickly burn or dry out. You must not expect to make a fine lawn with cheap seed. The best lawn grass mixture will cost more at first than the poorer substitute, but it will be found much cheaper and more satisfactory in the end. Our "Diamond Quality" Fancy Mixed Grass Seed is prepared from the choicest recleaned Grass Seeds that have been carefully selected for their fineness and deep rooting, close growing habits and seasonable qualities, producing an ideal dense, velvety turf of lasting quality that remains green throughout the year. *Sow one pound to* 400 *square feet*, 10 *to* 15 *pounds to a* 50-*foot lot.*

Growing tests have proved our "Diamond Quality" Lawn Grass to be superior to any other mixture for our Western soils and climate: it is also free from chaff and foul seeds, weighing 23 pounds to the measured bushel. This is a guarantee of clean, plump seeds, as cheap chaff seed is very light.

Single lb., postpaid, 45c; not prepaid, lb., 35c; 10 lbs., $3.25

SEASIDE LAWN MIXTURE.—A special mixture is required to meet the conditions on or near the coast, and this we call our "Seaside" Mixture. If your ground is very light or sandy, put on three or four inches of top soil to make a seed bed. After the grass is once up, the roots will penetrate the lower soil. Give plenty of water and an occasional dressing of our No. 5 Fertilizer.

Single lb., postpaid, 35c; not prepaid, 25c.

DIAMOND TENNIS COURT MIXTURE.—For those who prefer a grass court, our Tennis Court Mixture will give the best results possible, as it is made up of fine, close-growing, heavily-rooted grasses that make a dense and lasting turf.

Single lb., postpaid, 40c; not prepaid, 30c.

FINE MIXED LAWN GRASS.—For use where a temporary lawn must be quickly prepared, and if kept closely cut will be lasting and have a handsome appearance. A good, clean mixture.

1 lb., postp'd, 35c; not prep'd, 10 lbs., $2.20

DIAMOND SHADY LAWN MIXTURE.—Under trees, on the north side, and between houses, or in any shaded place, our "Shady Lawn" will give splendid satisfaction. But in seeding such places it is best to dig the ground up well and treat it with a little ground lime-rock, or air-slaked lime (using 5 or 6 pounds to 100 square feet), as ground that does not receive the sunlight is often soured. An occasional application of our No. 5 Lawn Fertilizer will stimulate the growth and improve the color.

Single lb., postp'd, 40c; not prep'd, 30c.

GOLF MIXTURES

OUR GOLF MIXTURES are prepared for the special purposes for which they are intended and are so blended as to give a tough, lasting, and evergreen turf that will stand wear and rough usage.

We have had splendid success in handling the difficult problems involved in making and maintaining large plantings, and are always ready to aid in the solving of your special planting problems.

PUTTING GREEN MIXTURE.—

Single lb., postp'd, 40c; not prep'd, 30c.

TEE-ING GROUND MIXTURE.—

Single lb., postp'd, 45c; not prep'd, 35c.

DIAMOND FAIR GREEN MIXTURES.—The problems to be met in plantings of this character, covering wide areas where the soil is not always of the best, require special study, and the mixtures must be varied to suit the conditions and requirements. Call or write. Your inquiries will have careful attention and we can save you any unnecessary expense.

Write for Market Price of large lots

"Diamond Quality"

GRASS SEEDS

Grass Seed Prices subject to change without notice. See note top of page 44.

Special Pasture Mixtures

No. 1. For Good Loamy Soil.

A mixture of Grasses and Clovers, prepared especially for good, loamy soils, that will give satisfaction as a permanent pasture, or for mowing for mixed hay. For pasture, sow 20 pounds per acre.

Price, postpaid, 35c per lb. By freight or express, 10 lbs., 23c per lb.; 15 to 50 lbs., 22c per lb. 100 lbs., $21.00.

No. 3. For Light Sandy Soil.

An extra fine mixture for sandy or light soils. This will make a good, strong turf, that under ordinary circumstances should last for many years. Sow 20 pounds per acre.

Price, postpaid, 40c per lb. By freight or express, 10 lbs., 27c per lb.; 15 to 50 lbs., 25c per lb.; 100 lbs., $24.00.

No. 4. For Dry Land.

Mixed especially for the regions between the Cascades and Rocky Mountains, and on good, common wheat land. Try this mixture, as we believe that it will give you best possible results. Sow 20 pounds per acre.

Price, postpaid, 35c per lb. By freight or express, 10 lbs., 23c per lb.; 15 to 50 lbs., 22c per lb.; 100 lbs., $21.00.

No. 8. For Arid or Alkali Land.

Particularly for arid alkali lands. This mixture is composed of varieties that have proven to be the best for the soils mentioned. Sow 20 pounds per acre.

Price, postpaid, 35c per lb. By freight or express, 10 lbs., 24c per lb.; 15 to 50 lbs., 23½c per lb.; 100 lbs., $23.00.

No. 9. For Sowing in Shady Places or Among Growing Trees.

This is a mixture of grasses especially suitable for sowing in wooded places, being made up of varieties that are superior for such a purpose.

Price, lb., 35c, postpaid; by freight or express, 10 lbs., 23c per lb; 15 to 50 lbs., 22c per lb.; 100 lbs., $21.00.

No. 10. Hay and Pasture Mixture for Dry Hill Land.

Especially suited to the dry sections, such as parts of Southern Oregon, Eastern Oregon, Eastern Washington, and Idaho. This mixture is made up of varieties that can endure a great change of temperature from heat to cold, and at the same time will make a splendid mixed hay.

Price, lb., 35c, postpaid; by freight or express, 10 lbs., 22c per lb.; 15 to 50 lbs., 21c per lb.; 100 lbs., $20.00.

No. 11. For Grazing Purposes.

This is a mixture of grasses only, being made up for the benefit of those who wish a mixture without Clover, and will make a fine permanent pasture, but is not intended for hay.

Price, lb., 35c, postpaid; by freight or express, 10 lbs., 22c per lb.; 15 to 50 lbs., 21c per lb.; 100 lbs., $20.00.

No. 12. For Burned-Over Bottom Land, or Land Inclined to be Rather Damp.

This is a mixture that will do well either for hay or for permanent pasture on land that is too wet for many of the grasses and clovers.

Price, lb., 30c, postpaid; by freight or express, 10 lbs., 19c per lb.; 15 to 50 lbs., 18c per lb.; 100 lbs., $17.00.

MIXTURES FOR BURNED-OVER LAND.—In grading and cleaning grasses and clovers, we frequently find combinations that are difficult of separation, and while the seeds are often of excellent germination and quality, they cannot profitably be separated and cleaned, so we blend them to produce pasture mixtures suitable for sowing on burns and logged-off land, which at the price are splendid values and very economical for such purposes. **Price, 100 lbs., $7.50**

Crested Dogs Tail

(Cynosurus Cristatus.)

A perennial grass with short, narrow leaves; valuable for lawns or pastures on dry, light land; makes excellent sheep pasturage. Use 20 pounds per acre if sown alone.

Per lb., 50c, postpaid.

Canadian Blue Grass

(Poa Compressa.)

Recommended in all pasture mixtures on dry soil; thrives well on clay or hard trodden and poor soil. Sow 28 pounds per acre.

Per lb., 30c, postpaid.

English Rye Grass

(Lolium Perenne.)

A strong-growing, hardy perennial grass, noted for its nutritive qualities. It is equally valuable for both grazing and hay. Forty pounds per acre.

For Lawns this is used and recommended by many gardeners. If sown thickly, it makes a fine lawn, and for large grounds and parks it is very successful.

Per lb., 25c, postpaid.

Kentucky Blue Grass

(Poa Pratensis.)

One of the best grasses for permanent pasture, furnishing a constant supply of the most nutritious feed during the greater part of the year. Sow 28 pounds per acre.

For Lawns.—Blue Grass is used very extensively for lawns and is found in all lawn grass mixtures. Sow 1 lb., to 400 sq. feet if used alone.

Fancy, per lb., 30c, postpaid.

Bermuda Grass

(Cynodon Dactylon.)

Suitable only for climates where the Winters are not below the freezing point. It stands the hottest and driest season. Sow six pounds per acre.

Per lb., 75c, postpaid; 10 lbs., $6.50

Red or Creeping Fescue

(Festuca Rubra.)

Forms a close turf and is valuable for lawn and golf mixtures; thrives in sandy soils and along the Coast. (14 lbs. to the bushel.)

Per lb., 45c, postpaid; 10 lbs., $3.30

Write for Current Market Price on lots of 100 lbs. or over.

WRITE US FOR SPECIAL MIXTURES FOR TERRACES, SHADY PLACES, DRY OR WET LAND.

GRASS SEED—Continued

Grass Seed prices subject to change without notice. See page 44.
Single pound prices postpaid, for larger lots add postage at zone rate.

Creeping Bent Grass

(Agrostis Stolonifera.)

Well adapted for sandy pastures near the Coast, and good for pasture on low lands. If sown alone, use 25 pounds per acre. Excellent for lawns. Use 12 to 15 pounds per 50-foot lot.

Per lb., 70c, postpaid.

Rhode Island Bent

(Agrostis Canina.)

Resembles Red Top. Makes a close sod; valuable for permanent pastures and meadows. Twenty-eight pounds per acre. For lawns, use 12 to 15 pounds per 50-foot lot. Gives good results.

Per lb., 55c, postpaid.

Italian Rye

(Lolium Italicum.)

A quick-growing grass, attaining a height of 2 ½ to 4 feet; very desirable for temporary meadows or pastures (will last from two to six years). Thrives best on soils that are slightly moist, and will even stand considerable overflow. Grows easily and bears an abundance of foilage that makes the best and sweetest hay imaginable. Sow 40 pounds per acre. **Per lb., 25c, postpaid.**

Sweet Vernal

(Anthoxanthum Odoratum.)

Valuable to put in pasture mixtures and lawn grass on account of its earliness and its delightful fragrance when in bloom. Thrives under all growing conditions, but is only recommended for use in mixtures. If alone use 28 lbs. per acre.

ANNUAL, per lb., 40c, postpaid.
PERENNIAL, lb., 70c, postp'd.

Timothy

(Phleum Pratense.)

This is the most valuable of all grasses for hay. Thrives best on moist, loamy soil. Sow early in the Spring or Fall. Sow 15 to 20 pounds per acre.

Choice, Per lb., 25c, postpaid.
Dia., fancy, lb., 30c, postpaid.

Red Top

(Agrostis Vulgaris.)

A good perennial grass. Generally sown for permanent pastures. Does best on moist or even marshy land. If the ground is not overflow land it is advisable to mix it with Meadow Fescue, Orchard Grass or Alsyke Clover. Sow 28 pounds per acre chaff seed; 14 pounds hulled.

CHOICE CHAFF, per lb., 25c, postpaid.

FANCY HULLED.—A very superior grade of Red Top that is free from chaff and light seed.

Per lb., 50c, postpaid.

Water Meadow Grass

(Poa Aquatica.)

An excellent pasture grass for wet situations, does well in bogs and marshes. Twenty lbs. to acre. Eleven lbs. to bu. **Per lb., postpaid, 50c**

Fine Leaved Fescue

(Festuca Ovina Tenuifolia.)

Grows well on dry or poor soil and is much used for lawns. Plant 30 lbs. to the acre. (Bu. 14 lbs.)

Per lb., postpaid, 65c

Write for Current Market Prices in lots of 100 lbs., or more.

Tall Meadow Oat Grass

(Avena Elatior.)

Often attains a height of three to four feet by the middle of June. Makes splendid hay and thrives on sandy loam, but makes its best growth where there is some clay. Can be fed as a pasture grass, and will generally bear cutting three times. For mixing with Perennial Rye and Alfalfa for sandy soils it is excellent. Sow about 30 to 40 pounds per acre alone, or half that amount if mixed with the above varieties. **Per lb., postpaid, 35c.**

Wood Meadow Grass

(Poa Nemoralis.)

Thrives in shaded situations in woodland parks or lawns where other grasses would not grow. Is early, permanent, hardy, resists heat and cold and makes a good turf, and is good for pasture; 3 lbs. to acre; 19 lbs. to bu. **Per lb., postpaid, 60c**

Orchard Grass

(Dactylis Glomerata.)

One of the most valuable of all the cultivated grasses, blooming with Red Clover, and making with it admirable hay. As a pasture grass it is more productive than any other, and does best under close feeding. Sow 28 pounds per acre.

Domestic, per lb., 35c, postpaid.
Imported, lb., 40c, postpaid.

Hard Fescue

(Festuca Duriuscula.)

Fine, rather dwarf, justly noted for its drouth resisting qualities. Valuable as a pasture for sheep. Sow 20 pounds per acre.

Per lb., 35c, postpaid; 10 lbs., $2.50

Sheep's Fescue

(Festuca Ovina.)

Grows freely in high, dry and open pastures. Its chief merit is for sheep pasture. Thirty-five pounds to the acre.

Per lb., 45c, postpaid; 10 lbs., $3.30

Meadow Fescue

(Festuca Pratensis.)

Perennial; grows three to four feet high. Roots deep, thus resisting drouth. It succeeds on any ordinary soil; yields a heavy crop of superior hay; one of the best grasses for pastures, being valuable to mix with other kinds. Sown alone, use 40 lbs. per acre. **Per lb., 30c, postpaid.**

Tall Fescue

(Festuca Elatior.)

Succeeds best in moist alluvial and strong clayey soils; is very productive and lasting; valuable for permanent pasture, is relished by stock and on rich land makes fine hay—height 3 to 4 feet; 22 lbs. bu.

Per lb., 35c, postpaid; 10 lbs., $2.40

FOR SPECIAL MIXTURES for BURNS, DRY or WET LANDS —Temporary or Permanent Plantings for Hay or Pasture — WRITE US

A "CLIPPER" Grain Cleaner improves the quality and increases the yield of any grain crop. When you buy a fanning mill BE SURE YOU GET A "CLIPPER." The mill with the "VERTICAL BLAST." Special Catalog and Full Information on Request.

GRAIN AND FIELD SEEDS—Continued

Cheat Seed

(Bromus Secalinus.)

Cheat yields a good crop of hay, especially on low or moist soil and will stand considerable overflow without harm. It makes an excellent hay for cows or horses, but should be cut before it gets too ripe. Sow in the Fall or early Spring same as oats, and about 100 pounds per acre.

Per lb., 15c, postpaid; 100 lbs., $2.25

Salt Bush

This wonderful forage plant will grow freely in arid and alkali lands that will produce no other vegetation, yielding a marvelously liberal foliage, which is eagerly eaten by all kinds of stock. One pound of seed will plant an acre if evenly scattered over the surface. The seed should be mixed with ten times its weight of sand or ashes to facilitate its distribution. Sow the seed in the Fall or Spring before a rain, if possible, on well pulverized soil, and cover it lightly. If desired, plants may be grown and transplanted when two or three inches high, six to seven feet apart.

Pkt., 5c; oz., 10c; ¼ lb., 40c; lb., $1.25 postp'd
Special price in quantity.

Rough-stalked Meadow Grass

(Poa Trivialis.)

A most valuable grass which flourishes in moist, rich soils. Roots are perennial, but soft; foliage freezes down. **Per lb., 60c, postp'd; 10 lbs., $5.00**

Reed Canary Grass

(Phalaris Arundinacea.)

Will Grow on the Wettest Land You Have.

A grass that will grow on stiff, wet land, even if the ground is overflowed for a month or six weeks. Makes a good hay if cut early in the season. Sow 10 pounds per acre.

¼ lb., 35c; lb., 85c, postpaid

Rape, Dwarf Essex

True, Pure Seed.

One of the best forage plants, producing immense quantities of green feed when grass and other crops are dried up. Highly recommended by Professor Shaw and other eminent authorities. Has yielded ten tons of green forage per acre with a food value double that of green clover. Excellent pasture for all stock, and fine green feed for chickens. Thrives on all soils and is ready for use in six to eight weeks from time of sowing. Also valuable for plowing under. Sow same as turnips from May until September, or sow with grain. Use four pounds per acre in drills, eight pounds broadcast.

Price, lb., 25c, postpaid. Frt. or Exp., 10 lbs., $1.40; 100 lbs., $12.50.

Rye, For Seed

BEARDLESS RYE.—This splendid variety is extremely hardy, yields heavily and being free from beards, is to be preferred for stock feeding. Can be planted Fall or Spring.

Single pound, postpaid, 15c

COMMON BEARDED RYE.—Planted extensively in both Spring and Fall.

Per lb., 15c, postpaid; 100 lbs., $2.30

Write for prices in lots of 100 or more lbs.

Sunflower

MAMMOTH RUSSIAN.—The largest and most productive variety. It makes one of the very best of foods for poultry; a great egg producer.

Per ¼ lb., 10c; lb., 25c, postpaid; 10 lbs., 80c

Mesquite

(Holcus Lanatus.)

It is usually sown on virgin soil, without cultivation, after the ground has been burned over. Sow about 35 pounds to the acre chaff seed; hulled 15 pounds per acre.

FANCY HULLED Seed, per lb., 30c, postpaid; 100 lbs., $16.00.

CHAFF SEED, Choice, per lb., 20c, postpaid; 100 lbs., $9.50.

Wild Rice—Zizania Aquatica

For Planting in Duck Ponds.

And around hunting grounds to furnish food for wild fowl, ducks, geese, etc. Fresh seed supplied in season. Write for information and prices.

Emmer or Speltz

Emmer—Triticum Dicoccum

Often Mistakenly Listed as Speltz.

Similar to barley in growth, but produces two grains in a spikelet. A comparatively new and profitable crop, yielding 50 to 100 bushels of grain, or four to six tons good hay per acre. Thrives well on poor soil, and dry weather seems not to affect it. After threshing, the straw makes good feed. Sow in Spring at rate of 75 to 100 pounds per acre. Emmer is often listed and referred to as "Speltz," We offer choice, recleaned seed of the true variety.

Price, lb., 15c, postpaid; 100 lbs., $3.75

"Diamond Quality" High Grade Fertilizers

It is established beyond question that different crops remove from the soil definite amounts of different Fertilizing elements, and it is the aim in manufacturing our "Diamond Quality" Fertilizers to supply these elements in the proportion which the crops require.

We do not make a fertilizer for every crop, as many plants require nearly the same proportion of foods, and though we have named our "mixed fertilizers" after the most important crop for which they are used, they can also be applied equally as well to others, as recommended in our booklet "Fertilizers."

FARM AND FIELD SEEDS - Continued.

PRICES *are current market at time this Catalag is made up and are subject to change without notice.* *See Page 44.*

YOU WILL ALWAYS GET FULL VALUE FOR YOUR MONEY.

Field Peas

Field Peas are a very profitable crop and are grown here very extensively. They can be grown alone or with oats. When planted with grain and cut green they make a large amount of very rich feed; also very valuable for enriching the soil if plowed under. The dry peas make excellent hog-feed and are quite fattening. Sow, if alone, 120 pounds to the acre; if with other grain, 60 pounds.

White Canadian

A leading kind; seed almost white; a heavy cropper. **Per lb., postpaid, 20c.**

Blue Prussian

Very much like the above, except in color. This variety is largely sold dried for soup peas. **Per lb., postpaid, 20c.**

FARMOGERM **For PEAS and VETCHES**

A $2.00 Package will produce as much nitrogen as 8 tons of manure. **See Page 49.**

Lentils

Succeed best in dry, sandy soil. A leguminous annual, the seeds of which are valuable for pigeons and are used largely for soups. The leafy stalks make good forage. **Per lb., postp'd, 30c**

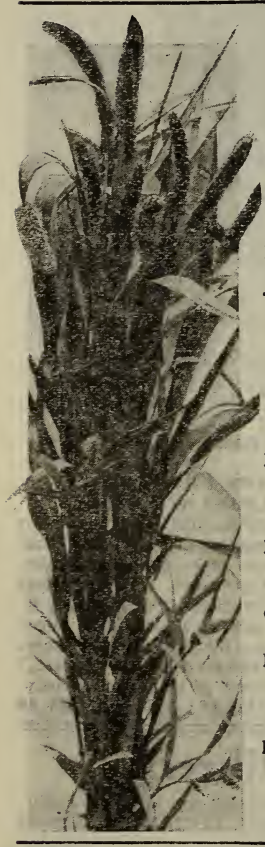
Vetches or Tares

Greatest Forage Plant.

COMMON VETCH—(Vicia Sativa).—One of the best forage plants that can be grown on the Pacific Coast. Often called Fall Vetches. This is a species of the pea, and is grown very extensively in Western Oregon and Washington. Especially in the Willamette Valley and on the Oregon Coast. It furnishes an abundance of excellent feed, either green or cut and cured for hay. The seed should be mixed with an equal weight of some variety of wheat, oats or rye having a stiff straw, and the mixture sown at the rate of two bushels per acre. Vetches weigh 70 pounds per bushel. Sow in the Fall or early Spring. **Per lb., postpaid, 15c.**

SAND, or Winter Vetches—(Vicia Villosa).—This variety thrives on poor, arid, sandy soils. It is sown either in the Fall or early Spring, and is generally mixed with rye, which serves to support the plants. It grows to a height of three or four feet, and can be cut twice; first, as soon as the bloom appears, and afterward for seed. The plant is perfectly hardy and makes a very nutritious food. **Not obtainable, as stock comes from Europe.**

WHITE SPRING, or Pearl Vetch.—Equally as valuable as the common vetch for Spring planting for forage or hay crop, soiling or for grain. **Per lb., postpaid, 20c.**



Cow Peas

Are really small beans of vigorous vining habit and heavy foliage of great nutritious value, yielding five to nine tons of green feed per acre, or can be cut and cured like clover. They are great nitrogen gatherers and one of the best fertilizers when turned under. Sow two bushels per acre.

WHIP-POOR-WILL.—Upright, or bush growth, earliest maturing, easily harvested. **Per lb., postpaid, 20c; 10 lbs., 85c.**

CLAY.—Of vigorous growth. Excellent for ensilage; can be planted in hills with corn. **Per lb., postpaid, 20c; 10 lbs., 85c.**

NEW ERA.—Early, Prolific, of upright growth, also makes good dry fodder. **Per lb., postpaid, 20c; 10 lbs., 85c.**

Millets

Sow in April, May or June, 12 to 15 lbs. for seed, or 20 to 30 lbs. for hay per acre

GERMAN OR GOLDEN.—An improved variety, yielding a larger crop of seed than the Common Millet. It is also taller than the Common, and yields a heavier crop of hay. **Per lb., postpaid, 20c.**

HUNGARIAN.—A dwarf annual Millet. It is finer than the Common or German Millets, but produces a closer stand and yields almost as much per acre as the taller varieties. Superior for hay. **Per lb., postpaid, 20c.**

NEW SIBERIAN.—New and wonderfully productive. Extremely hardy, and about two weeks earlier than the German Millet, growing four feet in height. **Per lb., postpaid, 20c.**

COMMON.—A well known variety growing from three to four feet high; has broad blades and strong stalks. **Per lb., postpaid, 20c.**

BROOM CORN MILLET.—Is somewhat variable in character and is divided into several varieties, one of which is sometimes called Hog Millet, as the seed is often used to feed hogs. All of this class are better adapted to produce seed than for pasture. **Per lb., postpaid, 20c.**

EARLY FORTUNE MILLET.—Has given astonishing yields of both seed and fodder. It is very early and is claimed to be rust-proof. The fodder can be fed to horses and other stock without injury, even after the seed has formed, which cannot be done with safety with most of the millets. The seed is large and of a beautiful red color. **Per lb., postpaid, 20c.**

A "CLIPPER" Grain Cleaner improves the quality and increases the yield of any grain crop. When you buy a fanning mill be sure you get a CLIPPER. Special Catalog FREE

GRAIN AND FIELD SEEDS—Continued

The Non-Saccharine Sorghums

Wonderfully productive and of great value as a forage, ensilage or grain crop in dry sections.

THE varieties here offered represent the best selections and are highly recommended. They are best drilled in—using 3 to 8 lbs. per acre, depending on variety and condition. Plant in the late Spring after the ground is warm. Cultivate often, throwing the earth toward the plants.

Milo Maize

This is one of the sorghums similar to Kaffir corn. Grows erect, with thick, close-jointed stalk. Height, 4 to 7 feet. Heads are very large, giving a heavy grain yield; is drouth resistant, and succeeds on alkali soil. Plant late when ground is warm, 3 to 6 pounds per acre.

Per lb., postpaid, 20c

Broom Corn—Dwarf Evergreen

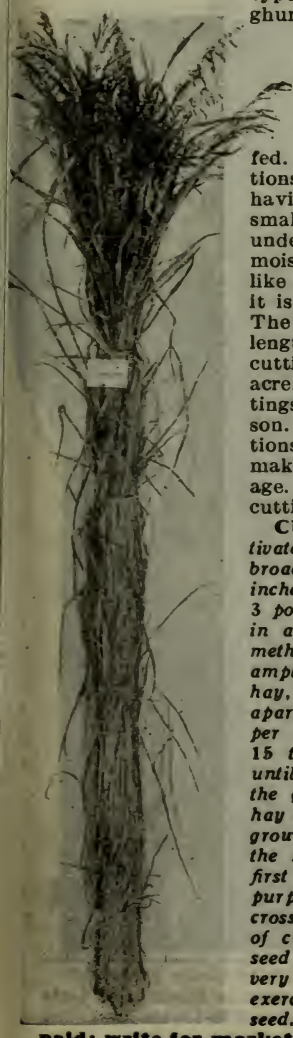
Grows from 4 to 5 feet high and makes straw of finest quality, being almost, if not entirely, free from crooked brush.

Per lb., postpaid, 20c

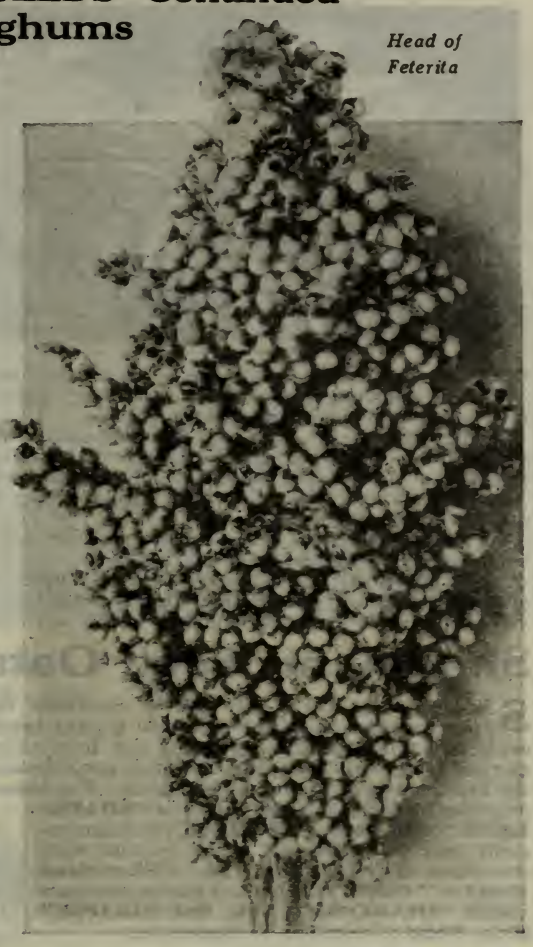
SUDAN GRASS

The greatest drouth resisting forage crop.

Sudan Grass was introduced from Egypt in 1909 by the U. S. Dept. of Agriculture, and has given great promise of becoming a valuable addition to our forage grasses, especially in some sections. It is believed to be the original type of our cultivated sorghums, and being an annual, will never become a pest like Johnson Grass, which it somewhat resembles. All stock relish it, and no harmful effects have followed where it has been fed. Under favorable conditions, it grows from 7 to 9 feet, having luxuriant foliage and small stems. While thriving under dry conditions, excessive moisture will not harm it, but like all of the sorghum family, it is easily damaged by frost. The yield will depend upon the length of the season, a single cutting giving about a ton per acre, and the number of cuttings will depend upon the season. Where growing conditions are favorable the stubble makes excellent green pasturage. In the South three or four cuttings are not uncommon.



CULTURE.—*Plant in cultivated rows, in close drills or broadcast. Cultivated rows 36 inches apart require from 1½ to 3 pounds of seed per acre, and in arid regions this is the best method. Where rainfall is ample, and it can be grown for hay, sow in drills 18 inches apart, using 6 pounds of seed per acre; for broadcast, using 15 to 20 pounds. Never sow until danger of frost is past and the ground is warm. Cut for hay as soon as fully headed. If grown for seed, do not cut until the seed is fully matured, the first cutting being best for this purpose. As Sudan Grass crosses readily with all varieties of cultivated sorghums and the seed resembles Johnson Grass very much, great care should be exercised in securing only pure seed.* **Price, lb., 30c, postpaid; write for market price on larger lots.**



Head of Feterita

FETERITA

This is the most recent of the non-saccharine sorghums to command the attention of "dry farmers" on account of its wonderful yield and drouth resistant qualities, being 20 to 40 days earlier than Kaffir corn, and has given immense crops in the driest seasons without having received a drop of rain. Makes splendid fodder as well as giving a good grain yield. **Try Feterita.**

Per lb., postpaid, 25c

Egyptian Corn

Also Called Jerusalem Corn or Dhoura

One of the non-saccharine sorghums, requiring the same growing conditions. Succeeds well in dry sections. Producing small heads on side shoots up to eight on a stalk, the seed is larger than Kaffir corn. Yield is heavy. Makes fine chicken feed. Plant three pounds per acre.

WHITE, Per lb., postpaid, 20c

Kaffir Corn

An excellent fodder plant. Grows four to five feet high; upright stalk, with numerous large leaves. Greatly relished by cattle and horses. The seed crop is also heavy, sometimes yielding 60 bushels to the acre. It does best sown in drills three feet apart, six to eight pounds per acre.

Per lb., postpaid, 20c; 10 lbs., 90c

Sugar Cane or Sorghum

EARLY AMBER.—A valuable crop to grow for fodder or ensilage, as it furnishes an immense tonnage to the acre. When fed down while young it makes a rapid second growth.

Price, postpaid, per lb., 20c

Prizewinning Sheaves of Shadeland Oats

THE production of fine seed oats has always been one of our leading specialties and we consider them to be the most profitable and satisfactory grain crop, being indispensible to stock and dairymen, and their use as a food is constantly increasing.

Planted in season, oats rarely fail, are easily and cheaply grown, and the valuable new varieties which we offer will double the number of bushels per acre that you would get from common seed oats, which means half the cost of production, or twice the profit.

They will mature in July from Spring sowing, giving quick returns and leaving the soil in good condition for Fall planting.

Of what other grain crop can so much be said, and what other crop is more necessary and valuable to the dairy and stock man?

We offer select, recleaned, well-matured seed oats of standard varieties, suitable for this section, and our own varieties, **"SHADELAND ECLIPSE"** and **"SHADELAND CLIMAX,"** the earliest and most vigorous, heaviest yielding oats ever grown anywhere.

Shadeland Seed Oats

SHADELAND OATS are grown especially for planting purposes, and each year typical heads are selected in the field by hand, and from these new seed is grown for revitalizing and perpetuating the type, and maintaining the standard. The Latest Selection from the splendid strain of **"SHADELAND" Side Oats** is **"ECLIPSE"** an improvement over **"Challenge,"** which in turn took the place of the original type, **"Shadeland Wonder,"** from which famous parent the marvelous **"SHADELAND Side Oat ECLIPSE"** is the Third Generation by reselection.

New — Shadeland Eclipse Side Oat

"SHADELAND ECLIPSE" is a re-selection from our famous "Shadeland Challenge," and is living up to its name by "eclipsing" all competitors, including the parent stock, being equally as vigorous and early and the massive heads are uniformly larger and filled with plump, heavy thin hulled oats of finest milling quality.

The yield on light dry soil where our seed crops are grown, runs from 75 to 85 bushels per acre and on moist bottom land 125 bushels per acre is not uncommon.

"SHADELAND ECLIPSE" can be planted Fall or Spring, west of the mountains (Fall plantings should be made on well-drained soil), but in severe climates early Spring planting is best. Matures in 90 to 100 days, and can always be harvested before the Fall rains. Their beautiful bright color and plumpness commanding the top price in the market. Try this grand new side oat.

Price: 3 lbs., 50c postpaid. Freight or Express, Half Bushel, $1.00; Bushel, $1.50; 100 lbs., $4.00.

"A BANNER DAY for POLK"

Gentlemen: Amity, Oregon, Oct. 5, 1915.

I have the pleasure of advising you that the three varieties of Shadeland Oats exhibited at the State Fair won first prize in each class, also the three varieties exhibited in the sheaf won the Blue Ribbon in strong competition; likewise the county they were grown in (Polk) won first, 17 counties competing. The Oats shown were Shadeland, also the School Children of Polk won with their exhibition—it was a Banner Day for Polk County.

Yours truly, C. D. NAIRN.

AN UNPARALLELED RECORD EVERY YEAR SINCE 1902 our grower, Mr. C. D. Nairn, has won first on Shadeland Oats at the Oregon State Fair, and at the Portland Land Show every time entered—1913-14-15, and was awarded a *Special Silver Medal at the Panama Pacific Exposition.*

SHADELAND SEED OATS—Continued

One of our Seed Fields of "Shadeland Oats," and Mr. C. D. Nairn, the Grower. Photo July, 1915.

Shadeland Climax—Tree Oat

For early Spring planting where seasons are short, in high, dry altitudes, and where quick growth and early maturity are demanded, "CLIMAX" is superior to any Oat ever before known, and will give you a bountiful harvest of the finest oats you ever saw. The white grains are uniformly large, plump and full with a very thin hull and are often borne 3 in a spikelet, which partly accounts for its wonderful yield.

In our trials "SHADELAND CLIMAX" has not been injured by severe early freezing and later drouth, but has stood up, green and vigorous, yielding one hundred bushels per acre on hill land when oat crops throughout the same section were stunted and dried up.

If you live West of the Cascade Mountains you can plant **"Climax"** Fall or Spring, any time the ground is fit, but where the climate is severe, Spring plantings are best.

Price, postpaid, 1 lb., 20c; 3 lbs., 50c; Frt. or Exp., ½ bu., $1.00; bu., $1.50; 100 lbs., $4.00.

☛TO KNOW that you are getting the genuine "SHADELAND" Oats from the originator, always buy direct from our store. We are SOLE distributors and the vitality and true types are maintained by intelligent, scientific care and selection. Prices are so low that you can not afford to risk any other seed oat.

Standard Seed Oats

Choice Recleaned Stock of the following varieties can always be supplied.

White Seed Oats

We always try to have a selected re-cleaned stock of No. 1 White Seed Oats which we can supply at market price. Write for samples and prices on the quantity you require, or send in your order. You will always get full value for money sent.

Price, postpaid, 1 lb., 15c; 100 lbs., $1.85

Gray Winter

This Oat is planted extensively throughout the Northwest as a Fall or Winter Oat. Is well and favorably known, being a good yielder, and the Oats are large and plump.

Price, postpaid, 1 lb., 15c. Frt. or Exp., 100 lbs., $2.05.

Swedish Red

A comparatively new tree Oat from Sweden having a soft hull and fine soft straw which is ideal for hay. This is the Oat grown so extensively in Northern California and along the Southern Oregon Coast. Sow in Fall or Winter. Red Oats always bring a good price in the market.

Price, postpaid, 1 lb., 15c; 100 lbs., $2.25

Formaldehyde

A Preventive for Smut in Grain—Scab and Fungus Diseases of Potatoes.

Formaldehyde is a clear chemical, resembling water, but has a peculiar odor. It is sold by the pound (pint). One pound is sufficient to treat 40 to 50 bushels of oats.

The following method is in general use: To treat 20 bushels requires ¼ pint of Formaldehyde diluted with 5 gals. of water. Spread the oats on a floor and sprinkle with the diluted solution. Then turn them twice with a scoop shovel. Allow to stand for 12 hours. Then spread to dry. Any quantity can be treated by using the same proportions. Oats thus treated will be entirely free from smut.

Prices, Pint, 40c, 2 for 75c; Gallon Jug, $2.50; Exp. or Frt., at purchaser's expense; cannot be mailed.

GRAIN AND FIELD SEEDS—Continued

SEED WHEAT

WHEN ready to buy any variety of Seed Wheat, write us for quotations on quantity wanted or send in your order and we will give full value at lowest market price. The following are standard market varieties that are known as the most profitable and best yielding:

SPRING WHEATS

Marquis

Marquis Wheat was produced by a cross of Red Fife and Hard Calcutta after a number of experiments extending over a period of nearly twenty years. It differs from the parent stock, Red Fife, inasmuch as it has a heavier head, shorter straw, and the grain is a little darker, more flinty and very heavy, weighing about 65 pounds to the measured bushel. Heads are beardless, chaff smooth. Marquis has been the most successful Spring Wheat ever produced, being extremely early and heavy yielding, giving a splendid account of itself in different sections of the country under many varying conditions.

Marquis was awarded the $1,000 prize at the New York Agricultural Show, as the best wheat grown on the continents of North or South America; won the $3,000 prize at the International Dry Farming Congress at Lethbridge, and Sweepstakes at Tulsa, Oklahoma, Dry Farming Congress. It is the earliest, heaviest yielding hard Spring Wheat, of splendid milling and baking quality, a hardy and vigorous grower. Try it.

PRICES: lb., 15c, Postpaid.

Blue Stem

The best known and one of the most profitable Spring varieties for the Northwest. Heads are large and well-filled, stools freely. Grain very hard. Although a Spring variety, can be planted as a Fall Wheat in sections where Winters are mild. The Blue Stem of the Pacific Coast has a white grain and smooth chaff, quite unlike the Velvet Chaff and Red grains of the states East of the Rockies. Better results are had with this Wheat East of the Cascade Mountains, as it has a tendency to lodge in the moist sections on the Coast.

Price, lb., 15c, postpaid

Little Club

This well known variety has stiff, strong, typical club head and does not shatter easily. Has been used as one of the parents of a number of the new Hybrid Wheats. Is a good grower and yields well. **Price, lb., 15c, postpaid**

Red Chaff

This important variety may be grown either as a Winter or a Spring grain. Is of good quality grading close to Blue Stem as a milling variety. **Price, lb., 15c, postpaid**

WINTER WHEATS

Forty Fold

Forty Fold is referred to as "Gold Coin" in some sections. Is quite early, seed resembling Blue Stem. A Favorite Winter variety in many localities, and in good demand for milling.

Price, lb., 15c, postpaid

Red Russian

This is extensively grown in the Palouse country of Eastern Washington, where conditions are favorable. It grows vigorously, maturing late, and gives a heavy yield of both grain and foliage. It is a superior variety for choking out weeds, growing close and luxuriantly.

Price, lb., 15c, postpaid

Turkey Red

A medium hard Red bearded variety; a heavy yielder and does not shatter out easily. Is very hardy, doing well in cold climates, but in moist sections has a tendency to lodge badly. The grain is hard and of good quality. A good Wheat for the dry sections East of the Cascades.

Price, lb., 15c, postpaid

Jones Winter Fife

Jones Fife is grown extensively in the Northwest, being hardy and drouth resistant, and is considered the most valuable Winter Wheat for the dry sections of Eastern Washington and Oregon. A heavy yielder and good grower, in good demand for milling. **Price, lb., 15c, postpaid**

☞ Market Prices of Seed Wheat is always changing *Write for Prices.*

The Clipper Grain and Seed Cleaner

Recommended and used by all State Agricultural Colleges and by the U. S. Department of Agriculture

No work done on the farm brings such large returns as thoroughly preparing the grain and seed by re-cleaning and grading for planting. This insures an even stand of strong, healthy plants, and a larger yield of a higher grade. The "Clipper" cleaner is especially adapted to this kind of work on account of its ability to separate the small, also the light, dead seed or grain from the perfect seed or grain.

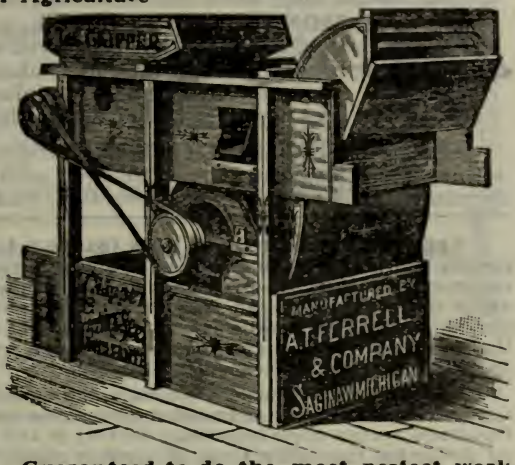
Other mills depend entirely upon screens for this work, and with unsatisfactory results. The "Clipper" screens all straw and foreign matter from the grain before it enters the air shaft, and the **"Vertical Blast" does the rest.**

Screens are so arranged as to be in plain view and of easy access to the operator while machine is in operation, and a set of 12 go with each mill. These are ample for general work—but special screens can be furnished for any cleaning operation.

The "Clipper" is a first-class, inexpensive and durable mill for general use.

PRICES: No. 1B.—Capacity 40 bu. wheat or 12 bu. of clover per hour. Wt. packed. 200 lbs....**$26.00**

No. 2B.—Capacity 20 bu. clover seed per hour. Wt., packed. 250 lbs.....**$10.00**



Guaranteed to do the most perfect work of any Hand Seed Cleaner manufactured.

Broadcast Seed Sowers

CAHOON

Little Giant

The best cheap seeder on the market, made in three sizes.

No. 3 Improved. weight 4 lbs.....**$2.25**
No. 3 weight 4 lbs..... **2.00**
No. 4 weight 3 lbs..... **1.65**

Tin Horn Seeder

Adjustable. A good serviceable seeder at a very low price. Weight 1 lb. **Each, 90c**

Cahoon

The standard broadcast seed sower of the world, made of steel, iron and brass and with ordinary care will last a lifetime. This is the most popular and best built seed sower; has a force feed and does excellent work. Instructions with each machine. Weight 9 lbs. **Price, $3.50**

LITTLE GIANT

WHEELBARROW SEEDER. The Thompson Wheelbarrow Seed Sower is light, strong and accurate. Covers the ground rapidly and evenly. Is not affected by the wind as it runs close to the ground. Send for descriptive circular. **Price, 14-foot spread, steel wheel, $8.50.**

Hand Planters

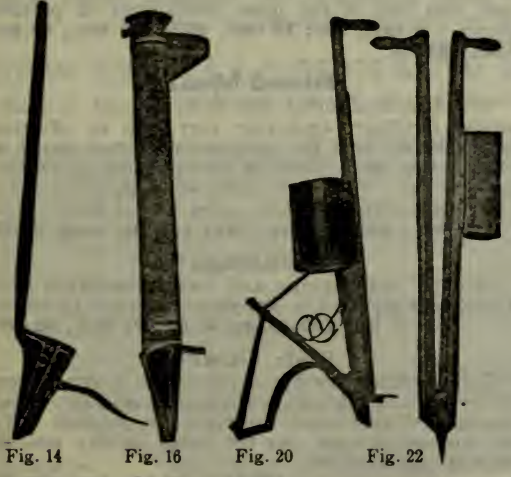


Fig. 14 Fig. 16 Fig. 20 Fig. 22

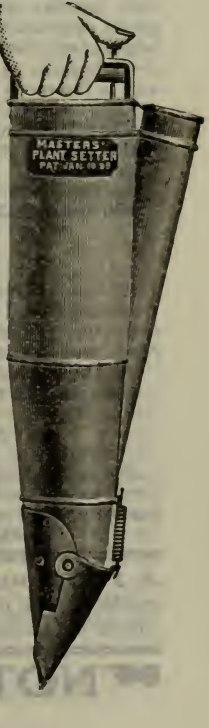
Potato Planters

PEERLESS. Tubular. (Fig. 16.) This light tubular planter locks itself as it is lifted out of the ground and the next potato may be dropped in at once. Opens automatically by forward movement. Wt. pkd., 5 lbs. **Price, $1.50**

PINGREE or ACME. (Fig. 14.) Similar in action to the tubular. You lift the planter up to drop in the potato. A strong, light and serviceable planter. Wt. pkd., 4 lbs. **Price, $1.00**

Masters Plant Setter

With a "Masters" you can set, water and fertilize 10,000 plants a day and do better work and your plants will make a more thrifty growth than if set by hand. Sets the plant firm, puts the water in the right place, works as fast as you walk. Sets cabbage, kale, celery, tomatoes and vegetable plants of all kinds. Wt. pkd., 5 lbs. **Price, each, $4.25**



Corn Planters

GORDON AUTOMATIC--One hand. (Fig. 20.) Puts the right number of kernels just where you want them, and at the proper depth. Is light, easily worked, requiring only one hand, either right or left. Is strong and durable. Wt. pkd., 6 lbs. **Price, $1.85**

ACME. (Fig. 22) A two-hand planter. Light, well made, and especially adapted to heavy, cloddy or stony soils. Adjustable—from pop corn to large kidney beans. Has spring brass cut-off and steel blades. Wt. pkd., 4 lbs. **Price, $1.00**

Diamond Fertilizers

The Base is Bone Meal and Tankage—No Cheap Filler. Every Pound is Good Fertilizer.

DIAMOND QUALITY Fertilizers are complete fertilizers of the highest grade and concentration, no inferior ingredients or cheap fillers are used in their preparation. Bone Meal and Tankage forming the base to which is added the necessary Potash, Nitrogen and Phosphoric Acid. Each package is marked plainly, showing the percentage of available plant food.

SPECIAL FERTILIZER BOOKLET giving complete details and prices of the different ertilizers which we can supply, together with full information for their application, will be sent on request. This booklet is instructive, reliable and of great value to all interested in fertilizers.

Applied in quantities of 1,000 lbs. to a ton per acre, our fertilizers, with intelligent culture will sustain and gradually improve the soil and increase the yield and quality of the product, even though the crop be entirely removed and no other manuring done. The roots, vines, stubble and whatever of weeds or waste there is, all assist in providing the necessary humus. A greater amount is often used to advantage by market gardeners. Complete instructions will be found in our Fertilizer Booklet, sent free. If there is any special information you require, write us; your inquiries will have our prompt and careful attention and our experience may help you.

Being the largest dealers, we carry the most complete stock of fertilizers and fertilizing materials in the Northwest, and having installed modern machinery for regrinding and mixing our "Diamond Quality" Fertilizers, we can make immediate delivery in any quantity, ground to a fineness and blended to a mechanical perfection that make them of superior excellence. Fertilizers that are machine mixed and fined are more thoroughly and evenly blended, are more readily available and give uniformly better results than when mixed by hand.

General and Vegetable Fertilizer

An all-round fertilizer, which can be used on any crop, but is especially adapted for grain and general farm crops. Analysis: Nitrogen, 2 per cent; phosphoric acid, 7.25 per cent; potash, .60 per cent.

10 lbs., 40c; 100 lbs., $2.10; per ton, $45.00

Fruit and Onion Fertilizer

This fertilizer is also used for blackberries, raspberries, etc. We sell large quantities for growing the famous Hood River strawberries. Analysis: Nitrogen, 2½ per cent; phosphoric acid, 10 per cent; potash, .60 per cent.

10 lbs., 40c; 100 lbs., $2.25; ton, $47.00

Odorless Lawn and Rose Fertilizer

Our Diamond Lawn Fertilizer promotes a vigorous, healthy growth, giving the desired dark rich green appearance; can be used at the time the seed is planted and later as a top dressing. One hundred pounds is sufficient for an ordinary city lot, and is far more effective and less objectionable than stable manure. Remember, it contains no weed seeds. When used as a top dressing it is best to make several light applications about two weeks apart.

10 lbs., 50c; 25 lbs., 75c; 50-lb. sack, $1.25; 100 lbs., $2.25; ton $47.00

Sheep Guano

The best natural manure, dried and ground. Concentrated, soluble; quick in action, and free from weed seed. Splendid for vegetables; fine for roses and flowers. Excellent for lawns.

10 lbs., 40c; 25 lbs., 60c; 50 lbs., $1.00; 100 lbs., $1.25; ton, $20.00.

Nitrate of Soda

For immediate results Nitrate of Soda is the very best for stimulating and forcing the growth of plants or any other crop.

Market unsettled--Prices on request.

Land Plaster, or Gypsum

Made from pure gypsum, free from clay or other foreign matter. This is especially valuable for clover crops.

10 lbs., 25c; 100-lb. sack, 75c; ton, $12.00

Lime Rock—Fine Ground

This is the form of lime recommended by the Agricultural Dept. Use ½ to 1 ton per acre.

100 lbs., 70c; ton, $10.50

Superphosphate

This is a concentrated form of phosphoric acid, and it is actually the cheapest form in which to buy phosphoric acid. Our present stock contains 17 to 18 per cent available phosphoric acid.

Per lb., 5c; 100 lbs., $1.75; ton, $30.00

Bone Meal

Fine ground, is one of the best fertilizers. This is the only grade of Bone Meal, and is reduced by improved machinery to an even fineness—nothing is added. This is a very valuable enricher of the soil, and one of the most economical at present prices. **5 lbs., 25c; 10 lbs., 35c; 100 lbs., $2.00; ton, $38.00.**

Blood Meal

Blood cooked, dried and finely ground, a quick-acting fertilizer, analyzing very rich in effective nitrogen; in fact, the nitrogen of Dried Blood is one of the most effective forms of organic nitrogen known. This also carries some phosphorus; is a strong fertilizer, a little going a long way.

5 lbs., 25c; 10 lbs., 35c; 100-lb. sack, $2.25

Tankage

Ground meat scraps and bone, dessicated in a vacuum, is very rich in phosphoric acid and nitrogen.

Per 100-lb. sack, $1.50; ton, $25.00

Fish Guano

Fish cooked, dried and ground is a strong fertilizer, rich in nitrogen, carrying considerable phosphorus and used largely by vegetable growers. We do not recommend this for lawns or city use, as odor is objectionable.

100 lbs., $3.25; ton, $60.00

A 100-pound Bag of High Grade Commercial Fertilizer *will contain more soluble and available plant food than 4,000 pounds (two tons) of stable manure of average quality. How much easier and cleaner to handle one 100-pound bag than 2 tons of manure, and there are no weed seeds to worry over.*

NOTE—AS FERTILIZERS ARE SOLD ON A SMALL MARGIN, PRICES ARE SUBJECT TO MARKET CHANGES, but you will always get FULL VALUE for your money.

FERTILIZERS—Continued

DIAMOND PLANT FOOD

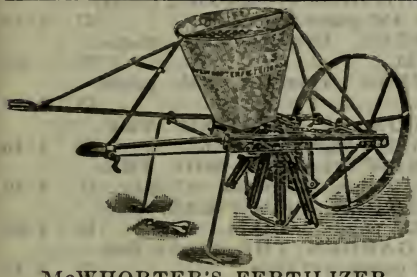
For Ferns, Palms and House Plants. Clean, Odorless, Highly Concentrated

A complete, highly concentrated, powerful fertilizer, clean and odorless, wonderfully invigorating to all plants; producing luxuriant foliage and larger and more brilliant flowers. A 25c package will feed a dozen large plants a whole year. Special instructions on each package.

Price: ½ lb. pkg., 15c; by Mail, 25c; 1 lb. pkg., 25c; by Mail, 40c

Our fertilizers contain generous supplies of vital plant food. Being highly concentrated and readily available, small quantities only are needed for the production of the finest crops. THEY ARE QUICK IN ACTION, RELIABLE AND ECONOMICAL.

FARMOGERM *is a practical success. A $2.00 package used on a leguminous crop will produce as much nitrogen as 8 tons of manure.* **See Page 49**



McWHORTER'S FERTILIZER DRILL

McWhorter Fertilizer Drill No. 21

For the Practical, Superior Distribution of Commercial Fertilizers--Simple in Construction, Easily Understood and Effective in Operation.

This machine needs no defense or praise from us. Wherever known, it is pronounced the best. Has a force feed without friction; does not require that degree of dryness in the fertilizer necessary to all other distributors we have seen; is so arranged that the fertilizer can be applied in any manner that may be desired, as the operator has perfect control of the spread and division of same, any change for that purpose requiring only a few seconds.

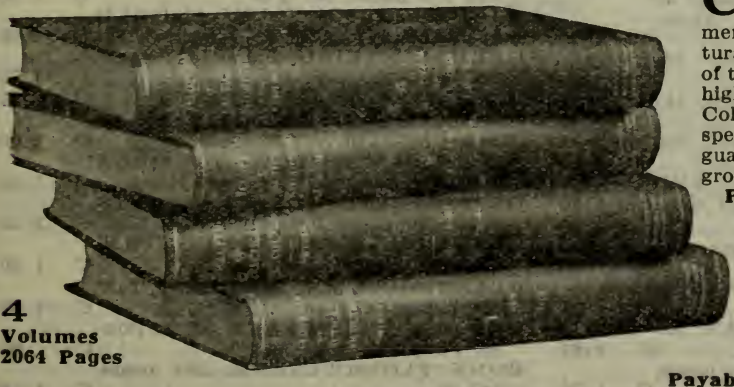
It will distribute the fertilizer in one or more furrows beside the growing crop or broadcast to any extent up to a uniform spread of over two feet, without removing or adding any part or loosening a bolt, and in any quantity from a few pounds up to forty or more pounds to the hundred yards of row, or from 200 pounds to over a ton to the acre. We call special attention to this ability to **spread** the fertilizer with this machine. It is a highly important feature and will be appreciated by the thinking farmer. A decidedly wrong thing is to apply the strong fertilizers of the present day without sufficiently spreading and incorporating them with the soil. **Shipping weight, 61 pounds.** **Price, complete, $14.00**

BOOKS

Books are the inspiration, the authoritative guide, that enables you to command success, and you should have the standard references on the subjects in which you are interested.

NEW ENCYCLOPEDIA OF PRACTICAL HORTICULTURE

Of special interest and value to Northwestern growers



COMBINING the experience of over 200 scientific, practical men, leaders in all lines of agricultural and horticultural endeavor, men of today with up-to-date methods, the highest authorities of our Agricultural Colleges, Government experts and specialists. Written in plain language, telling in detail what every grower must know to succeed.

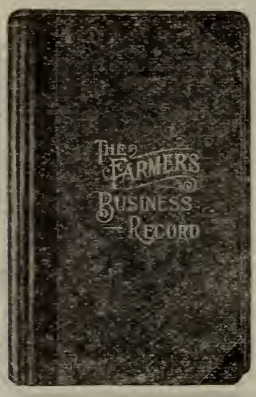
Prepared by men whose lifework has been right here in the Northwest. An invaluable reference for every grower, orchardist, nurseryman or florist. Four volumes green buckram, 516 pages each.

CASH PRICE, delivered, $20.00
INSTALLMENTS, $22.00
Payable $4.00 down, $3.00 monthly.

Sample pages and full information on request.

This great store-house of practical, workable information will be laid on your table for $4.00 down, and $3.00 per month for six months. **You** need this for **yourself**—for your future success. **Send for it today.**

For Standard text and reference works by recognized authorities.
Special orders for books not listed will have prompt attention—Pages 62-63-64.



FARMER'S BUSINESS RECORD

A simple complete system of business accounting in one convenient book.

Arranged by special rulings and headings so that only the figures need be recorded. Gives a complete record of every transaction. Requires no knowledge of bookkeeping—so simple that any one who can make figures and read can keep this perfect record and know to a cent how much the profit or loss is for the year, and can compare this year's records with last or any previous year or month. This wonderful book will hold your records for twenty years; also contains a fund of priceless information, valuable tables, weights and measures, formulas for stock remedies and foods, forms for contracts and business and legal agreements.

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FARM GARDENING AND SEED GROWING, Brill, 166 pages, 5x7 ½ in.	C	1.10
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Note: C indicates cloth; P, paper cover

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LAWNS AND HOW TO MAKE THEM, Barron, 174 pages, 5x7 ½ in.	C	1.15
MANURE, THE BOMMER METHOD OF MAKING, 86 pages, 6x9 in.	P	.30
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A complete guide for amateur rosegrowers, is the latest, most beautiful and complete work that the English have given us; 64 beautiful half-tone engravings, 8 pages of superb color plates; if you love roses, you should have this book.—**An ideal gift book**—278 pages, 5 ½x8¼, **$2.15, postpaid.**

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EGGS AND EGG FARMS, 96 pages, 9x11 ½ in.	P	.50
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FORAGE CROPS, Voorhees, 384 pages 5 ½x7 ½.....C $1.65
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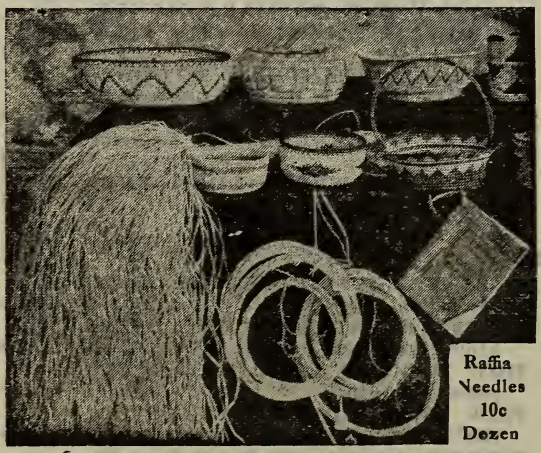
SWINE, DISEASES OF, Craig, 190 pages, 5x7.....C .85
SWINE HUSBANDRY, Coburn, 312 pages, 5x7.....C 1.60



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FOR BASKET MAKING

Raffia weaving has become very popular. Baskets, jewel boxes, shopping bags, mats, cushions, slippers and hats are but a part of the many useful articles woven.

In ordering raffia by mail, be sure to add postage.

RAFFIA.—Any shade, the popular colors being red, green, yellow, orange, brown, black, blue and purple.

Prices: Natural color, **¼ lb., 10c;** postpaid, **15c** per lb., **25c.**

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BASKET MAKING Tells how to use Raffia and Reeds. **25c postp'd**

English and German Names of Grains and Field Seeds

ENGLISH	GERMAN	ENGLISH	GERMAN
Wheat	Weizen	Red Clover	Rother Klee
Oats	Hafer	White Clover	Weiszer Klee
Rye	Roggen	Alfalfa	Lucerne
Barley	Gerste	Timothy	Timotheus
Buckwheat	Buckweizen	Orchard Grass	Brautgras
Emmer	Emmer	Red Top Grass	Weisen fuchs schwanz
Cheat	Cheat	English Rye Grass	Englishes Raygras
Flax	Flachs	Italian Rye Grass	Italienisches Ray Gras
Lentils	Linse	Millet	Hirse
Vetch, or Tares	Wicke	Blue Grass	Blaugras

Get a "FARMER'S BUSINESS RECORD." See Page 62.

Foreign Names of Vegetables, Grains and Fruits

This List includes only those varieties that are in general cultivation.

ENGLISH	FRENCH	GERMAN	ITALIAN
Artichoke	Artichaud	Artischoke	Carciofo
Asparagus	Asperge	Spargel	Asparago or Sparagio
Beans, dwarf	Haricot, Nain	Bohnen	Fagiuolo
Beans, pole	Haricot a'Rames	Stangen Bohnen	Frihol
Beet	Betterave or Bette Rouge	Rothe Ruebe	Barbabietola
Borecole or Kale; see Kale			
Broccoli	Brocoli	Spargelkohl	Broccolo
Brussels Sprouts	Chou Verts	Rosenkohl	Cavolo di Bruxelles
Cabbage	Chou Pomme	Kopf Kohl or Kraut	Cavolo
Cabbage Savoy	Chou de Milan	Wirsing	Cavolo Cappacio
Cauliflower	Chou-fleur	Blumenkohl	Cavolflore
Carrot	Carotte	Gelbe Rübe or Mohre	Carota
Celery	Celeri Mavet	Sellerie	Sedano or Appio
Celeriac	Celeri-rave	Knoll-Sellerie	Appio Marone
Chervil	Cerfeuil	Kerbel	Cerfoglio
Chicory	Chicorice Sauvage	Gemeine Cichorie	Cicoria
Corn, Maize	Mais	Mais	Mais
Corn Salad	Mache	Feldsalat	Valeriana Domestica
Collards	Chow Coba	Blatterkohl	
Cress, Curled	Cresson Alenois	Garden-Kresse	Crescione
Cress, Water	Cresson de Fontaine	Brünnenkresse	Crescione di Sorgente
Cucumber	Concombre	Gurke	Citriuolo
Egg Plant	Aubergine or Melongerce	Eierpflanze	Melanzana
Endive, Curled	Chicoree	Endivie	Indivia
Endive, Batavian	Escarolle	Blat-endive	Escarolle
Garlic	Ail	Knoblauch	Aglio
Horseradish	Raifort	Meerrettig	Ramolaceio
Kale	Chou Frise	Blätter or Grünen Kohl	Cavolo Riccio
Kohl Rabi	Chou-rave	Kohl Rabi	Cavolo Rapi
Leek	Poireau	Gemeiner Lauch	Porro
Lettuce	Laitue	Lattich or Garten-salat	Lattuga
Melon, Musk	Melon Musque	Zucker-Melone	Mellone or Popone
Melon, Water	Melon d'eau	Wasser-melone	Cocomero or Anguria
Mushroom	Champignon	Essbare Blatter-schwamme	Pratajulo bianco, Fungo
Mustard	Moutarde	Senf	Senapa or Mortarda
Okra or Gumbo	Gombaud	Okra	Ocra
Onion	Ognon	Zwiebel	Cipolla
Oyster Plant; see Salsify			
Parsley	Persil	Petersilie	Petrosemolo
Parsnip	Panais	Pastinake	Pastinaca
Pea	Pois	Erbse	Pisello
Pepper	Poivre	Pfeffer	Pepe
Potato	Pomme de Terre	Kartoffle	Patata
Pumpkin	Citronille or Potiron	Melonen Kürbis	Zucca
Radish	Rave	Rettig	Ravanello or Radis
Rape	Navette	Repskohl	Rapa Selvatica
Rhubarb	Rhubarbe	Rhabarber	Rabarbaro
Salsify or Oyster Plant	Salsifis	Haferwurzel or Bocksbart	Sassifica
Spinach	Epinards	Spinat	Spinacio
Squash	Courge	Speisie Kürbiss	Zucca
Tomato	Tomate	Liebesapfel	Pomidoro
Turnip	Navet	Rübe	Rapa or Navone

FRUITS

Almond	Amande	Mandel	Mandorla
Apple	Pomme	Apfel	Mela or Pomo
Apricot	Abricot	Apricose	Albicocca
Cherry	Cerise	Kirsche	Ciriegia
Currant	Groseille	Johannisbeere	Ribes
Fig	Figue	Fege	Fico
Filbert	Noisette	Nussbaum	Avellana or Noccinola
Gooseberry	Groseillier a Maquereau	Stachelbeere	Uva-Spina
Grape	Vigne	Traube	Uva
Lemon	Limon	Limonie	Limone
Mulberry	Mure	Maulbeere	Mora
Nectarine	Brugnon	Nectarpfirsch	Pesche Noci or Nettarine
Olive	Olivie	Oelbaum or Olive	Uliva
Orange	Orange	Pomeranze	Arancia
Peach	Peche	Pfirsiche	Pesca
Pear	Poire	Birne	Pera
Plum and Prune	Prune	Pflaume	Susina or Prugna
Pomegranate	Grenade	Granatenbaum	Melagrana
Quince	Coing	Quitte	Melacatogna
Strawberry	Fraise	Erdbeere	Fragola
Blackberry	Murier de Renard	Brombeere	Moro di Rovo
Raspberry	Framboise	Himbeere	Lampone

☞Get a Farmer's Business Record. Be a Business Man. See Page 62

"DIAMOND QUALITY" FLOWER SEEDS

FLOWERING plants are enjoyed by everyone, and cut flowers for home use or flowering plants for garden display can easily be grown; their care is a pleasant and healthful diversion, and for the small expense of time and money nothing will return so much pleasure and profit. If you have any planting problems, if you wish to produce special effects or work out color schemes, write us; we will be glad to assist you in every way possible, and our experience is at your service.

CULTURE.—Cultural directions are printed on the back of nearly all packets. Flowers usually succeed best in a sandy loam, made rich with well-rotted manure, which should be made fine and thoroughly mixed with the soil. A soil thus prepared will remain moist and loose, so that flower seeds, which are generally small and delicate, will germinate and grow with vigor.

After the plants are up they require plenty of air and moisture, but they must not be too wet or they will "damp off." When large enough to transplant, put them in boxes or pots, giving them plenty of room, then when the ground is warm enough to put them outside, each plant will have a nice clump of roots. But if they are left in the seed bed and are close together, they will be weak and will not thrive.

A common mistake with flower, as well as other seeds, is planting too deep. A good rule is to plant the same depth as the thickness of the seed, and always press the soil down firmly, as this helps the seed to secure a firm hold and also retains the moisture.

A hotbed or cold frame is very convenient to start seeds in, as the temperature and moisture can be so regulated as to make their germination and rapid growth more certain. Most seeds do well if sown in boxes in a sunny window in the house.

Plants are usually ready to be transplanted when they have made a growth of two inches.

INFORMATION THAT WILL AID IN SELECTION OF FLOWERS.

Annuals bloom and ripen the first year and then they perish. Many annuals in warm climates, or when taken in, or protected during Winter, become perennial, with short lives.

Hardy Annuals, Biennials and Perennials can be sown in the open ground early in the Spring if desired, and Hardy Biennials and Perennials do not require any protection in Winter.

Perennials flower several years in succession.

Biennials do not generally flower the first year, and are in their perfection the second year.

Half-Hardy Annuals, Biennials and Perennials should not be sown in open ground until settled warm weather, though they can be sown in the house, if desired, early, and afterwards transplanted. The two latter need to be protected in Winter, or carried over until Spring in cold frames or greenhouses.

For the convenience of our customers we have grouped annuals together—separating them from the Biennials and Perennials, and have arranged a classified list giving color and habit of flowers and plants to aid in selections for special effects.

"Diamond Quality" SWEET PEAS

Sweet Peas Head the list as our most beautiful and popular annual

OUR Famous "Diamond Quality" Sweet Peas are selected with critical care and we offer the best productions of the foremost growers, including the latest, most valuable novelties. We conduct careful trials, and, for quality and assortment of varieties, our stocks are unsurpassed. Although we list only those we consider best, we can supply any variety in commerce, and special orders will receive careful attention.

CULTURE.—First and most important, plant as early in the Spring as the conditions will permit. If the ground is well drained earlier flowers can be had from Fall plantings. The ideal soil is cool, moist, and well drained, and should be dug up the previous Fall, manure well worked in, and left to lie in the rough through the winter. In the early Spring work this down enough to plant, which can be done before conditions will permit working of ground that has not been previously prepared. This gives an earlier and better start than if you wait until Spring to work your soil, but the late Spring plantings will often give very satisfactory results in some sections.

Seeds should be sown at the rate of one ounce to fifteen feet. Make a trench about three to four inches deep, planting the seeds in the bottom about two inches deep, pressing the soil down firmly. After the plants are well up, thin to four or five inches apart, and draw the soil around them until the trench is filled above the level. This gives a depth to the roots, preserving the moisture. Keep the ground well worked and water if needed, an occasional thorough soaking being better than a daily sprinkling. Keep the flowers cut close and a pruning of the tips of the vines will also aid in prolonging the season of bloom and insuring better flowers.

For 1916 Home Collection of Sweet Peas. See pages 68-69.

DIAMOND QUALITY

Sweet Peas

Red Spencer

1916 "Home Collection"

Six Famous Spencers

Best of their color

Red Spencer—Bright crimson scarlet.

White Spencer—Pure white.

Margaret Atlee — Duplex — pink and cream.

Asta Ohn—Lavender.

Thomas Stephenson—Orange, scarlet.

Countess Spencer—Shell pink and silvery white.

Entire Collection

Six pkts., one each, 50c

Six oz. pkts., one each, $2.00

SWEET PEAS reach their greatest perfection in our cool climate, and our 1916 Home Collection, best in their class, will give you a splendid assortment of the most beautiful and brilliant colors. Flowers are large, of finest form, and borne on long stems.

To be sure of having the finest Sweet Peas and lots of them

ORDER THE "HOME COLLECTION"

FOR 1916 NOVELTIES AND RARE NEW "SPENCERS," SEE PAGE 69

THE NUMBERS OF THE FLOWERS refer to the various types, and we have marked the Dahlias we list with the number, illustrating its type or form. This will aid in your selections.

KALIF Collection

Illustrated above—gives you 7 of the finest garden and cut flower Dahlias. Worth $3.80 for **$2.75**

For complete list of finest Dahlias, see pages 114-119

1916 DIAMOND COLLECTION

SIX MAGNIFICENT SWEET PEAS

Including the Wonderful New "Fiery Cross"

PRICE; Six packets—One each, 60c

"Fiery Cross"

NEW "FIERY CROSS"—a truly wonderful new Sweet Pea for 1916. In the words of the introducer "Fiery Cross" has every appearance of live fire, the color being a dazzling fire-red or scarlet without shading or markings. Scintillating and glittering in bright sunlight with a glowing fire-like sheen that radiates over the flower.

Unlike other orange scarlet varieties "Fiery Cross" does not scorch or burn even in intense sunlight, and can be grown without shading.

The beautifully waved and fluted flowers are borne freely on long stout stems.

Silver medal National Sweet Pea Society of England, special awards Philadelphia and Panama-Pacific Exposition and Silver Medal of American Sweet Pea Society, Newport, 1915.

Pkt., 10 Seeds, 25c

"MARGARET ATLEE".—The most perfect of the Duplex type yet produced. Color is a warm salmon pink suffused over a cream ground. The cream deepens into a bright buff at base of standard and wings. Flowers are of very large size and are borne almost uniformly four on a stem. Certificate of merit. **Pkt., 10c; oz., 35c**

ELFRIDA PEARSON.—Pale pink on white ground, a rare beauty; vigorous and very free blooming; classed as the best pink Spencer by National Sweet Pea Society of England. **Pkt., 10c; oz., 35c**

ROYAL PURPLE.—A rare new shade in Sweet Peas, a rich purple, almost a true royal, a color that does not exist in the Grandiflora type. **Pkt., 10c; oz., 50c**

KING WHITE.—The newest and most magnificent white; of perfect Spencer type; the immense petals gracefully frilled—are a pure white of wonderful substance. **King White** has the most enthusiastic endorsement ever accorded a sweet pea. **Pkt., 10c; oz., 35c**

WEDGEWOOD.—A true self—being a beautiful Wedgewood blue; entirely free from the purple shading found in other blue Spencers. **Wedgewood** is also larger, grows more vigorously, and blooms more freely than other blues. Certificate of merit. **Pkt., 10c; oz., 35c**

FARMO-GERM

makes vigorous vines—more and better Flowers

25c and 50c Packages

See page 49

New Spencers

A Splendid Collection, including the Best of the Recent Novelties

THE new "Spencer" type has lovely waved and fluted flowers of gigantic size, and in exquisite colorings; length of stem, and lasting qualities are much superior to the older types. "Spencers," however, are very shy seeders and require much careful selection to develop fixed types. The seed is therefore scarce, and cannot be cheaply produced.

ILLUMINATOR.—A brilliant orange-salmon ground, illuminated with bright cerise pink; a rare and wonderful color combination of great beauty. First class certificate. **Pkt., 10c; oz., 35c**

AMERICA--Spencer.—The largest and finest of its class. Pure satiny white, striped and splashed brilliant crimson; 4 flowers of perfect form borne on long stems. **Pkt., 10c; oz., 35c**

APPLE BLOSSOM SPENCER.—A truly giant flower; color standard rose with deeper veining, wings light carmine, ground color primrose. **Pkt., 10c; oz., 35c**

ASTA OHN.—Lavender, suffused with mauve; of perfect form, largest size, 4 blossoms on long, strong stems; very vigorous. **Pkt., 10c; oz., 35c**

CONSTANCE OLIVER.—A clear, rich pink on cream ground; of true Spencer type; best of its color. **Pkt., 10c; oz., 35c**

COUNTESS SPENCER--Pink.—The first Sweet Pea of the Spencer type. Flowers extremely large, beautifully expanded, crumpled and waved. Color silvery white, suffused and tinted with soft shell pink, deeper at the outer edges. **Pkt., 10c; oz., 35c**

DAINTY--Spencer.—A pure, glistening white with distinct margining of bright rose pink; comes four blossoms on long stems. Dainty is all its name implies and is the best picotee edge yet produced; very large and wavy. **Pkt., 10c; oz., 35c**

DIAMOND LAWN and ROSE FERTILIZER

A 100-lb. sack applied in two or three dressings will maintain the average lawn for the entire season, promoting a luxuriant growth and rich dark green coloring—clean, odorless, easily applied—economical—our Fertilizer Booklet tells things you should know about Fertilizers, and will be mailed free to you on request.

"SPENCER" SWEET PEAS—Continued

CAPTAIN OF BLUES SPENCER.—A Spencer type of the **Captain of Blues Grandiflora.** Standard of flowers bright violet-purple, wings lavender blue. **Pkt., 10c; oz., 35c**

"DUPLEX CREAM".—The standards are large, bold and beautifully curved. A vigorous grower and produces many fours. Color a deep rich cream. **Pkt., 10c; oz., 35c**

FLORA NORTON.—Bright blue with just a tinge of purple, fine Spencer form. **Pkt., 10c; oz., 35c**

FLORENCE NIGHTINGALE--Spencer.—Finest new lavender of immense size. Bold, erect flowers of charmingly soft, rich lavender with very delicate suffusion of rose; a beautiful, self-colored flower, frilled and waved. Bears four blooms on extra long stems. **Pkt., 10c; oz., 35c**

GEO. HERBERT.—Our own select strain; a bright rosy-carmine, open form, beautifully waved; a magnificent, vigorous Sweet Pea of giant size. **Pkt., 10c; oz., 35c**

HELEN LEWIS.—A giant flower of perfect form; standard rich crimson orange, wings orange rose; open form, full, wavy. **Pkt., 10c; oz., 35c**

KING EDWARD SPENCER.—Bright crimson scarlet, largest size, wavy standard; drooping wings, very long stems; one of the finest bright reds. **Pkt., 10c; oz., 35c**

MARJORIE WILLIS.—A brilliant rose carmine of the Marie Corelli class and considered a better flower, of the finest Spencer form, the long stems carry four well-placed flowers; one of the best. **Pkt., 10c; oz., 35c**

MAUDE HOLMES--Spencer.—A brilliant sunproof crimson of the largest size. Of true Spencer form, wavy and fluted. **Pkt., 10c; oz., 35c**

MRS. ROUTZAHN.—Color, a soft straw tinted with blush pink, shading to apricot and rose at the edges, with a distinct rose margin; of immense size; one of the finest Spencers. **Pkt., 10c; oz., 35c**

MRS. WALTER WRIGHT.—A distinct bright shade of rosy mauve, extra large, fine flower, waved and ruffled, vigorous and free-flowering. **Pkt., 10c; oz., 35c**

OTHELLO SPENCER.—Very deep maroon of largest Spencer type; wings very wavy, large graceful flower; best of its color. **Pkt., 10c; oz., 35c**

PARADISE IVORY.—A grand ivory white Spencer of the finest form. Large flower of good substance on long stems. A vigorous, tall grower. **Pkt., 10c; oz., 35c**

PRIMROSE SPENCER.—Color, a true primrose. Very vigorous, free-flowering, excels in beauty of form, length of stem and keeping qualities. **Pkt., 10c; oz., 35c**

QUEEN ALEXANDRA--Spencer.—We will all welcome Queen Alexandra in Spencer form. An extra fine intense scarlet, sunproof Sweet Pea. Of large, full, waved form. Free-flowering and vigorous. **Pkt., 10c; oz., 35c**

SENATOR--Spencer.—Of finest Spencer form and largest size. The coloring is a combination of deep claret and chocolate, striped and flaked on a light heliotrope ground. The coloring, though dark, is brilliant and attractive. A free-flowering, vigorous grower of greatest merit. **Pkt., 10c; oz., 35c**

STIRLING STENT.—Color, a deep salmon suffused with orange. The flowers are of supurb Spencer form, particularly effective by artificial light. First class certificate and silver medal from the National Sweet Pea Society of England. **Pkt., 10c; oz., 50c**

THOMAS STEVENSON.—The most brilliant orange scarlet, standard of deeper color than the wings. The flowers are of the finest Spencer form and generally come four to the stem. **Pkt., 10c; oz., 65c**

VERMILION BRILLIANT.—An intense pure scarlet self-color of rare beauty and substance. Absolutely sunproof. **Vermilion Brilliant** is the finest flower of its color. A stocky, vigorous, grower, profuse bloomer, the long, strong stems carry four perfect flowers. **Pkt., 10c; oz., 65c**

WHITE SPENCER.—A pure white flower of enormous size. beautifully crinkled and fluted, of splendid substance. **Pkt., 10c; oz., 50c**

"UNWINS"

Splendid New Sweet Peas in this Popular Class

THE "UNWINS" resemble the Spencer type, although being of entirely different origin. They are not quite so large as the Spencers, but of fine form and substance, very vigorous and free-flowering, and always come true. In this respect they are superior and more dependable than Spencers, which often "sport" in the most unaccountable manner. For substance, color and bloom, Unwins are unsurpassed.

PRICE, except where noted, Pkt., 5c; oz., 25c.; ¼ lb., 75c.

CHRISSIE UNWIN.—Beautiful cherry scarlet, self-color, wavy, standard finest form.

E. J. CASTLE--Crimson Rose.—A magnificent open form flower of grandest size and unique coloring, being a rose crimson veined deeper rose, its brilliancy being enhanced by artificial light; fluted border.

FRANK DOLBY.—Color, delicate light lavender of great beauty, bold, wavy standard with widely spreading fluted wings.

GLADYS UNWIN--Light Pink.—A large, bold flower, not hooded, but with standard and broad wings, of the new orchid-flower type, this is similar to Countess Spencer, but several shades lighter in its lovely pink color.

NORA UNWIN--White.—A grand pure white of the same beauty of form, waved and fluted standard and wings as Gladys Unwin. Award of merit at the trials of the N. S. P. S., Reading, England; one of the finest whites.

PHYLLIS UNWIN--Deep Rose.—The largest of the Unwin types, beautifully waved and crinkled, standard upright, wings broad. Flowers 3 to 4 on long stems. Color, a rare shade of deep rose, self-color.

PRINCE OLAF.—A fine new Unwin of largest size. Flaked and striped, blue on a white ground.

ST. GEORGE.—Brilliant orange standard, the large wings a distinct orange carmine; does not burn in the sun; one of the best orange shades

MASTODON PANSIES

For 1916 we offer for the first time "Mastodon Pansies" in separate colors—**Panama-Pacific, Yellow, Mastodon Bronze,** and **Mastodon White.** See Page 77.

SWEET PEAS—Continued
GRANDIFLORA TYPE

Select List of Finest Large Flowering Sweet Peas, The Best of Their Color and Type

Prices, unless otherwise stated, 5c per pkt.; 15c per oz.; 40c per ¼ lb.; $1.25 per lb., postpaid

Pink and White

BLANCHE FERRY.—Standard wide and erect, bright rose pink, wings are creamy white, tinted with rose.

Red, Scarlet and Maroon

QUEEN ALEXANDRA.—An intense bright scarlet of grand substance; a bold, robust flower of giant size and finest form, is sunproof, very vigorous and free-flowering.

KING EDWARD VII.—A lovely, intense crimson. A truly giant flowered variety. The finest crimson to date. Strong stems and growth.

PRINCE OF WALES.—Rose crimson. Fine sort.

BLACK KNIGHT.—Large size; a rich, dark claret, almost black; somewhat veined.

Pink—Deep Shades

JANET SCOTT.—A large, grand flower; deep, rich pink.

Orange and Salmon

HENRY ECKFORD.—A distinct orange scarlet of the finest form and largest size; as beautiful under artificial lights as in daylight.

MISS WILLMOTT.—Described as an "orange pink" delicately shaded rose. Enormous flowers, borne erect on long, stiff stems.

ROSE DU BARRI.—Deep carmine rose and orange. While of the grandiflora type, Rose Du Barri is large, full and slightly waved.

Pink—Light Shades

DAINTY.—Large flowers, white with pink edge.

LOVELY.—The most beautiful shades of soft shell-pink, changing to very light rose at the outer edges. Grand flowers of large size.

PRIMA DONNA.—A most beautiful bright shade of blush-pink. Flowers of a large size, and finest form.

White

DOROTHY ECKFORD.—Pronounced by Sweet Pea experts to be the grandest pure white yet seen of the grandiflora type. Grows an enormous mass of bloom.

Cream or Light Yellow

GOLDEN-ROSE.—The large flowers are of fine open form, with standard gracefully fluted. A clear crimson yellow, beautifully flushed with rosy pink.

HON. MRS. E. KENYON.—Rich, primrose. A bold, giant flower. The best in this shade.

SYBIL ECKFORD.—A unique shade of apricot-lemon, one of the finest Eckfords.

MRS. COLLIER.—A true primrose of fine form.

Lavender

LADY GRISEL HAMILTON.—Most attractive light lavender shading; flowers of large size.

Blue and Purple

LORD NELSON, or "BRILLIANT BLUE."—A brilliant dark navy blue with tips of wings a lighter blue. Giant flowers, slightly hooded.

Blue and White

HELEN PIERCE.—The most beautiful bright shade of true blue mottled on a brilliant pure white ground; 3 or 4 blossoms on a long stem. A grand flower of the largest size; very free and vigorous.

LOTTIE ECKFORD.—Flowers beautifully shaded with light blue on a white ground and boldly edged deep, rich violet; very dainty.

Striped and Variegated

AMERICA.—Bright red on a silvery white ground; showy.

Sweet Peas in Mixture

Diamond Mixture

This is the most perfect blend of the finest named varieties it is possible to produce. As formerly, this mixture will contain the novelties of the preceding season, and the addition of the rare Spencer types will make this the grandest mixture of new, large-flowering Sweet Peas we have ever offered. It will delight the most critical; if you are undecided as to the varieties or colors you want, buy the **"Diamond Mixture."**

Sold in 1-oz. sealed pkts. only, at 15c each; 2 for 25c; 12 for $1.25. Not sold in bulk.

EXTRA MIXED.—Select standard varieties of the finest colors.

Pkt., 5c; oz., 15c; ¼lb., 40c; ½lb., 60c; lb., $1.00.

Our Superb Mixture
True Spencers Only

A splendid mixture, carefully proportioned and blended to produce pleasing and harmonious combinations of color, containing the most beautiful shades and variations of the wonderful Spencer type. **These are not seedlings, but carefully selected named varieties that retain all their purity and brilliancy of color.**

Pkt., 10c; oz., 30c; ¼ lb., $1.00; lb., $3.00.

Special Mixtures to Order

If you want to produce any special effect or color scheme, let us know your requirements. We can supply the correct color or mixture.

For Perennial Peas, See Perennial Flower Seeds.

DIAMOND PLANT FOOD

For Ferns, Palms and House Plants. Clean, Odorless, Highly Concentrated

Produces Luxuriant Foliage---Brilliant and Lasting Flowers. A 25-cent package will feed a dozen large house plants a whole year.

Price: ½-lb., Pkg., 15 cts. Postpaid 25 cts. 1-lb., Pkg., 25 cts. Postpaid 40 cts.

ANNUAL FLOWER SEEDS

And Those Generally Used as Such

CHARMING effects for every planting purpose can be had at very little expense by the proper planting of Annual Flowers, Vines and Foliage Plants. For classified list showing what is best for various purposes, see page 85.

Annuals bloom the first year, and many of our most popular flowers come in this class—under favorable conditions a few varieties will continue to live longer than one season, but as a rule they perish, and in planting for permanent effects the perennial plants are generally selected, the annuals being used for the first one or two seasons until the perennials become established as all do not bloom the first year.

ASTERS—Oregon Grown Seed

ASTERS grow to perfection in our mild, cool climate and splendid strains of the best-known sorts have been developed by careful selection. As Fall bloomers for garden or cut flowers, asters are most satisfactory, and the varieties we offer being acclimated can be depended on for best results, rivaling the chrysanthemum in size and beauty. Asters require a rich, moist soil. Seed should be sown inside in March, and plants transplanted to the open ground when the weather is settled and warm. **Plants in season—see Plant Dept.**

"CREGO GIANT" ASTER.—The "Giant Crego" is distinct in every way, and its magnificent flowers, often 6 inches in diameter, are fully equal to chrysanthemums. They have rare beauty of form and brilliant coloring, are very vigorous, and free flowering; blooms are borne on long stems.
White, Shell Pink, Rose, Purple, Lavender.
Pkt., 15c; ⅛ oz., $1.00

PACIFIC BEAUTY.—A rich true lavender, with big fluffy blooms on strong stems; free bloomer and great keeping qualities; originated in Oregon. New. **Pkt., 25c**

GIANT CRIMSON.—A new velvety crimson of branching habit, upright grower. Excellent for garden decoration and cutting. Showsup well under artificial light and presents a very attractive appearance for an unusually long period in the Fall. **Pkt., 10c**

ASTER-MUM.—A selection from "Giant Comet." Of immense size, resembling Chrysanthemums in form, hence the name "Aster-mum." Plants are about two feet high with good stems. A little earlier than "Crego." Three colors.
White, Pink, Lavender.
Pkt., 10c; three, one of each color, 25c

"MIKADO" OR ROCHESTER.—Another new type of Aster of great merit. A favorite with florists. Has very long, narrow petals straight at the outside, but toward the center they cross and recross in splendid confusion, giving the bloom a beautiful, fluffy fullness. Mikado is very vigorous, with strong branching habit, producing a blossom on every shoot.
Lavender—Pink, Pkt., 15c; ⅛ oz., $1.00

SEMPLE'S LATE BRANCHING.—A magnificent strain; flowers large, beautiful, double, and borne on long stems.
White, Rose, Shell Pink, Lavender, Purple, Mixed, Pkt., 10c; ¼ oz., 35c

LAVENDER GEM.—An exquisite shade of true lavender, of the comet type; free flowering erect habit; one of the finest yet produced.
Pkt., 15c; ⅛ oz., $1.00

DAYBREAK.—Flowers are full, large and round, borne freely on long stems. Color a dainty shell pink. Very early. Height, 18 inches.
Pkt., 10c; ⅛ oz., 75c

PURITY.—Same as "Daybreak," excepting color, which is a pure, glistening white.
Pkt., 15c; ⅛ oz., 75c

"CREGO GIANT"
Most Popular ASTER

GIANT COMET.—One of the handsomest of the tall growing sorts; flowers large and beautiful; petals long and twisted.
Rose, Crimson, Dark Blue, Light Blue, White, Mixed, Pkt., 10c; ¼ oz., 50c

QUEEN OF THE MARKET.—Best early Aster, of graceful spreading habit. Two weeks ahead of other varieties.
Rose, White, Dark Blue, Light Blue, Mixed, Pkt., 10c; ¼ oz., 40c

FIRST PRIZE for Best Exhibit has been awarded to our "Diamond Quality" DAHLIAS every time we have shown.—They represent the choicest, most improved varieties from the most Famous Producers. They are true to name and have proven their merits in the big European and American Shows, and in our own field trials.

THEY WILL WIN FOR YOU—See Pages 68 and 114.

ANNUAL FLOWER SEEDS—Continued

Acroclinium—Everlasting

Growing about 15 inches high, bearing white or rosy pink flowers, when cut in bud state, can be dried and used for winter boquets. **Pkt., 5c**

Ageratum

MEXICANUM NANUM.—Adapted for borders and bedding; covered with feathery blossoms all Summer; sow seed in early Spring in boxes to transplant or sow out of doors and thin to 4 to 6 inches. **Pkt., 5c; ¼ oz., 15c**

Ammobium

One of the hardiest everlastings. The flowers are not large, but beautiful in form, and pure white. Very desirable for Winter bouquets. An easily grown annual. **Pkt., 5c**

Alyssum

Fine for borders, edging and rockwork; a dainty little flower. In borders, sow thickly so as to form masses. Sow in Spring or late in August.

Maritimum. Sweet. **Pkt., 5c; oz., 30c**
Maritimum. Little Gem. **Pkt., 5c; oz., 50c**
Procumbens. Of trailing habit; profuse bloomer. **Pkt., 10c; ¼ oz., 20c**

Amaranthus

Handsome foliage and interesting flowers, making a striking effect in borders and beds.

Melancholicus Ruber. Deep red foliage; dwarf. Pkt., 5c
Caudatus. Graceful, drooping flowers. **Pkt., 5c**
Tricolor, or Joseph's Coat. Foliage scarlet yellow and green. **Pkt., 5c**

Bachelor's Button

CENTAUREA CYANUS or Corn Flower.—A hardy annual, easily cultivated. Has recently been greatly improved, and now produces handsome flowers of a great variety of rich colors. Borne on tall, branching stems, with but little foliage. Striking and handsome.

Cyanus. Fine single mixed. Pkt., 5c; oz., 25c
Cyanus. Fine double mixed. Pkt., 10c; oz., 50c
Cyanus. Alba, single white. Pkt., 5c; oz., 35c
Cyanus. Azurea, single blue. Pkt., 5c; oz., 35c

Balloon Vine

A rapid growing climber, 10 ft. high, inflated seed pods, flowers white. **Pkt., 5c; oz., 25c**

Balsam—"Lady Slipper"

Handsome plants, producing masses of various colored flowers, half hardy.

Tall Double Camellia Flowered mixed, Pkt., 5c; ¼ oz., 25c
Dwarf Double mixed, Pkt., 5c; ¼ oz., 15c

Brachycome—Swan River Daisy

A charming flower in white and blue varieties. The plants grow about twelve inches in height and bloom freely. They make elegant border plants.

Blue, White, Mixed, Pkt., 5c

Browallia—Lavatera

Handsome and free flowering. Covered all summer with rich blue and white flowers. 18 inches high.

Mixed, Pkt., 5c

Calendula—Pot Marigold

The well-known Pot Marigold, valued by Europeans for flavoring soups and stews. Flowers are dried in Fall and kept in paper bags for use. In mild climates this plant will bloom nearly all the year round. Plant in early Spring in open ground.

Double Mixed, Pkt., 5c; ½ oz., 15c

Catchfly—Silene

A hardy annual, yielding for a long time a profusion of umbels of bright colored flowers. The plant is covered with glutinous moisture, to which flies adhere; hence its name.

Fine Mixed, All Colors, Pkt., 5c; oz., 25c

Canary Bird Flower—Tropaelum Canariensis

Climbing plant with graceful foliage, yellow flowers. **Pkt., 5c; ¼ oz., 15c**

Calliopsis

Very showy and attractive, always covered with a mass of bright flowers, fine cut flowers.

Single Mixed, Pkt., 5c; ½ oz., 25c
Double Mixed, Pkt., 5c; ½ oz., 25c

Candytuft—Iberis

One of the most highly prized annuals for beds or masses, very useful for cutting.

Odorata, Pkt., 5c; oz., 25c
White Empress, Pkt., 10c; oz., 50c
Carmine, Pkt., 5c; oz., 40c
Dark Crimson, Pkt., 5c; oz., 40c
Mixed, Pkt., 5c; oz., 25c

Celosia Cristata—Cockscomb

Very attractive and showy, producing massive heads of deeply colored flowers.

PRESIDENT THIERS.—Dwarf, crimson comb. **Pkt., 10c; ¼ oz., 50c**

FINEST VARIETIES.—Mixed. **Pkt., 5c; ¼ oz., 35c**

Centaurea

ODORATA CHAMELEON.—Handsome fragrant yellow and rose flowers. **Pkt., 10c; ¼ oz., 50c**

IMPERIALIS.—Sweet Sultan: Sweet scented flowering variety. **Pkt., 10c; ¼ oz., 25c**

YELLOW SWEET SULTAN. — (Suaveolens.) Grecian Corn flower. **Pkt., 10c; ¼ oz., 25c**

Castor Bean—Ricinus

Highly ornamental, of stately growth and having large leaves of bronze or glossy green; of very easy culture.

SANGUINEUS.—Brilliant scarlet stems and fruit. **Pkt., 5c; oz., 20c**

ZANZIBARIENSIS.—Surpasses all in size and beauty of colors. Mixed. **Pkt., 5c; oz., 20c**

BORBONIENSIS ARBOREUS.—The largest variety. **Pkt., 5c; oz., 20c**

MIXED.—Best varieties. **Pkt., 5c; oz., 15c**

NEW HYBRID. PANORAMITANUS.—Dark brown leaves; very decorative. **Pkt., 5c; oz., 25c**

Chrysanthemum

Very showy, effective and desirable as Summer flowering plants. Hardy annuals.

CORONARIA.—Double mixed. **Pkt., 5c; ¼ oz., 15c**

CARINATUM.—Single mixed. **Pkt., 5c; ¼ oz., 15c**

Clarkia

Hardy annual of easy growth, produce a fine effect massed in beds, flowers bright and attractive.

Single and Double mixed, Pkt., 5c; ¼ oz., 15c

ANNUAL FLOWER SEEDS—Continued

Cobaea Scandens

(Plants in season.)

A handsome, rapid-growing, climbing plant, having large, bell-shaped flowers, beautiful foliage and peculiarly delicate and curious tendrils.

Purple, **Pkt., 10c; ¼ oz., 25c**
White, **Pkt., 10c; ¼ oz., 50c**

Cosmos

Seed sown in March or April and transplanted to open ground will produce plants three to five feet high by September, which thereafter and until November, will yield hundreds of blossoms three inches across; they are of various shades, from pure white to purplish crimson. Both foliage and flowers are unsurpassed for bouquets and vases. Annual. (Plants in season.)

LADY LENOX.—A magnificent type of extraordinary size and rare beauty. Color, a delightful pink. Beautiful under artificial light. The oval petals form a perfectly circular flower, which keeps well when cut. **Pkt., 10c; ¼ oz., 25c**

KLONDYKE.—Blooms very early and continuously; three to four feet high; flowers large, golden yellow and borne on long stems. **Pkt., 10c; ¼ oz., 25c**

MAMMOTH FLOWERING.—White, pink, crimson or mixed. **Pkt., 10c; ¼ oz., 25c**

MARGUERITE.—New and odd; very pretty, petals fringed. Mixed. **Pkt., 10c; ¼ oz., 25c**

EARLY DAWN.—White, flushed pink; very early. **Pkt., 10c; ¼ oz., 35c**

Cypress Vine—Ipomoea Quamoclit

Climber with rapid growth, handsome foliage and bright attractive flowers.

White, Scarlet or Mixed, Pkt., 5c; oz., 25c

Delphinium—(Larkspur)

The annual Delphiniums are quite hardy and bloom in the later Summer months, furnishing flowers of striking beauty in form and color. Tall varieties are suitable for shrubberies and borders, while the dwarf sorts produce charming effects in beds.

DWARF ROCKET.—Finest colors. Double mixed. Hardy annual. **Pkt., 5c; ½ oz., 25c**

STOCK FLOWERED, OR TALL BRANCHING. Finest double mixed. **Pkt., 10c; ¼ oz., 25c**

Euphorbia

Suitable for beds of tall growing plants; foliage very ornamental.

VARIEGATA.— Snow on the Mountain. Variegated foliage. 2 feet. **Pkt., 5c**

HETEROPHYLLA.—Painted leaf. Annual poinsetta. 3 feet. **Pkt., 10c**

Eschscholtzia—California Poppy

These are generally classed and grown as annuals, but are true hardy perennials. See description under perennials.

Echinocystis, Lobata—Wild Cucumber

A rapid-growing climber. Very good for covering old fences or trellises. Hardy annual. **Pkt., 5c; oz., 25c**

Four O'Clock—Mirabilis Jalapa

MARVEL OF PERU.—Easy culture, bearing a profusion of bright flowers of various shades. Flowers open at four o'clock, close in the morning.

Choice Mixed, **Pkt., 5c; oz., 15c**

Gaillardia

Perennial Gaillardia Page 80
PLANTS in Season

Gaillardia—Blanket Flower

Very showy garden plant, with brilliant flowers; free blooming from early Summer until Autumn; especially effective in masses.

PICTA.—Large, handsome, crimson and orange flowers. Hardy annual. Single. **Pkt., 5c; ¼ oz., 15c**

PICTA LORENZIANA.—Double; finest mixed; annual. **Pkt., 5c; ¼ oz., 25c**

MIXED.—Annual. Many shades of yellow, orange and scarlet. **Pkt., 5c; ¼ oz., 15c**

Gilia

A hardy annual, growing 12 inches high, small delicate flowers valuable for rock work or borders.

Tall sorts Mixed, **Pkt., 5c; ½ oz., 15c**

Godetia

Profuse and constant bloomers, compact and bushy in growth, flowers of exquisite shades and colors.

Semi-dwarf, Fine Mixed, Pkt., 5c; ¼ oz., 15c
Lord Roberts, Dark Red, Pkt., 10c; ¼ oz., 25c

Globe Amaranth—Gomphrena

An old favorite, everlasting flower.

Mixed, **Pkt., 5c; ¼ oz., 20c**

Gourds

For covering verandas and trellis work, rapid growth, bearing fruits of curious sizes.

Calabash, **Pkt., 5c; oz., 25c**
Dipper, **Pkt., 5c; oz., 25c**
Bottle and Egg Shaped, **Pkt., 5c; oz., 25c**
Large Varieties Mixed, **Pkt., 5c; oz., 25c**
Small Varieties Mixed, **Pkt., 5c; oz., 25c**

Helichrysum—Straw Flower

MONSTROSUM.—Everlasting. One of the best for Winter bouquets. Hardy annual. Double mixed **Pkt., 5c; ¼ oz., 25c**

ANNUAL FLOWER SEEDS—Continued

Hibiscus—Marshmallow

Of easy culture and exceedingly showy; has large cup-shaped flowers.

Extra Mixed, **Pkt., 5c**

Hyacinth Bean—Dolichos Lablab

Rapid growing, ornamental, climbing annuals, bearing clusters of beautiful purple and white flowers, followed by highly ornamental seed pods. Mixed. **Pkt., 5c; oz., 15c**

Hollyhocks—New Annual

HYBRIDA SEMPERFLORENS.—This splendid variety will bloom in August, from Spring planting, continuing until frost. This is a great advantage, as other varieties do not bloom until the second year. Try them.

Finest New Single Mixed, Pkt.,10c; ¼ oz.,50c

Finest New Double Fringed Mixed, Pkt., 25c

Ice Plant

MESEMBRIANTHEMUM CRYSTALINUM.—Pretty Summer trailing annual for vases and rock work; leaves covered with ice-like drops.

Pkt., 5c; oz., 35c

Kochia Trichophylla—Summer Cyprus or Fire Bush

Forms symmetrical highly decorative bushes, foliage green, turning to fiery red in Autumn.

Pkt., 10c; ¼ oz., 25c

Linum—Crimson Flax

ANNUAL.—Beautiful and effective; hardy, about 18 inches high; covered with bright scarlet flowers. **Pkt., 5c; oz., 25c**

Lobelia—

Delicate, low-growing, annual plants of the greatest value for borders, ribbons, edgings, rock work and hanging baskets.

HYBRID HAMBURGIA.—New; light blue with white eye, long, drooping flower stalks; fine for hanging baskets or boxes; grows rapidly.

Pkt., 10c; ⅛ oz., 50c

GRACILIS.—Blue, trailing; beautiful for baskets. **Pkt., 5c; ¼ oz., 25c**

CRYSTAL PALACE COMPACTA. — Dwarf flowers very fine and rich, deep blue; finest for bedding and edging. **Pkt., 10c; ⅛ oz., 50c**

COMPACTA.—Finest mixed. **Pkt., 5c; ¼ oz., 50c**

COMPACTA EMPEROR WILLIAM. **Pkt., 10c; ⅛ oz., 40c**

WHITE LADY.—New, white flowering. **Pkt., 10c; ¼ oz., 50c**

Marigold or Tagetes

A hardy plant in dwarf and tall varieties; foliage bright green and deeply cut. Flowers are various shades of yellow and brown. French or dwarf varieties good for borders. African or tall varieties good for background.

AFRICAN, Tall or Dwarf, Double Mixed, **Pkt., 5c; ¼ oz., 20c**

FRENCH, Tall or Dwarf, Double Mixed, **Pkt., 5c; ¼ oz., 20c**

Mimosa—Sensitive plant

PUDICA.—Very curious and interesting plant, its leaves closing if touched or shaken. Annual. **Pkt., 5c**

Moon Flower—Ipomoea Mexicana Grandiflora

Rapid growing climber belonging to the "Morning Glory" family. The flowers are large, waxy white, and very showy **Pkt., 10c; ¼ oz., 20c**

Mignonette—Reseda

A quick-growing annual, highly esteemed for its delicate fragrance. It grows most rapidly and produces the largest and finest spikes of blossoms during cool, moist weather of early Spring and late Fall months, but will flower freely throughout the Summer from seed sown early in Spring. A second planting should be made about the first of August to furnish large, fine spikes of flowers during the cool Fall months.

ODORATA GRANDIFLORA. — Large, well-formed, fragrant flowers. **Pkt., 5c; oz., 25c**

ALLAN'S DEFIANCE.—A choice strain for forcing. Spikes of enormous size and intensely rich perfume. One of the most desirable for open ground. **Pkt., 10c; ½ oz., 50c**

PARSON'S WHITE.—Flowers almost pure white; very fine. **Pkt., 10c; ½ oz., 50c**

MACHET--White.—Splendid dwarf variety, best white. **Pkt., 15c; ½ oz., $1.00**

GOLDEN QUEEN.—Dense, dwarf growth; flowers golden yellow; deliciously fragrant. **Pkt., 10c; ½ oz., 50c**

MACHET--Red, Victoria.—Dwarf, compact flowers red; fine. **Pkt., 10c; ½ oz., 50c**

Morning Glory

The tall varieties are popular, well known, rapid growing climbers of the easiest cultivation. Very fine for covering arbors, trellises, porches, etc. The Minor, or Dwarf varieties flower very freely and do not require support.

CONVOLVULUS MAJOR.—Tall, choice single, mixed, all colors. **Pkt., 5c; oz., 15c**

DOUBLE MIXED.—Tall. **Pkt., 10c; ½ oz., 25c**

CONVOLVULUS MINOR.—Dwarf mixed. **Pkt., 5c; oz., 25c**

IMPERIAL JAPANESE FRINGED.—These have very large fringed flowers in a great variety of the most exquisite colorings; handsome, variegated foliage. Mixed. **Pkt., 10c; oz., 25c**

JAPANESE DOUBLE MIXED.—This double Japanese sort is very fine in leaf, flower and growth. **Pkt., 25c; oz., $1.00**

Nemophila—Love Grove

Hardy annuals of neat, dwarf, compact growth; fine for borders, pot culture or rockeries. Flowers blotched and beautiful. Mixed varieties. **Pkt., 5c; ½ oz., 15c**

Nicoliana

A very showy plant, producing star-shaped flowers of delicious perfume. Taken up in the Fall, cut back and potted, will bloom freely all Winter. Half hardy annual, three feet high.

AFFINIS.—White. **Pkt., 5c; ¼ oz., 25c**

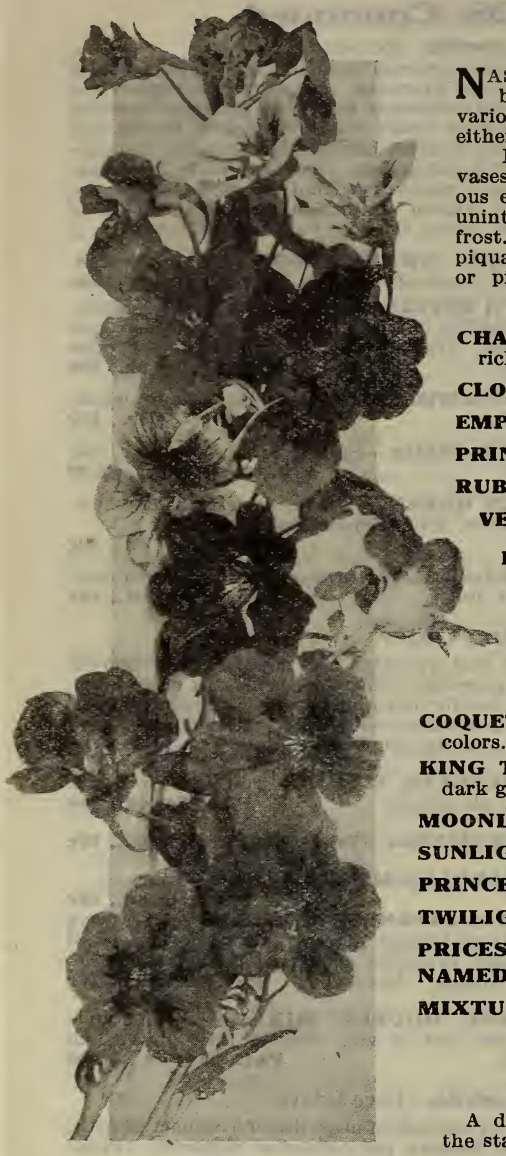
HYBRIDIA.—Splendid mixed. **Pkt., 10c; ¼ oz., 50c**

SANDERAE.—Resembles the "Affinis," but unlike that variety, does not close up in the daytime. The plant is literally covered with carmine-red, fragrant flowers. **Pkt., 15c**

SYLVESTRIS.—Pure white, fragrant, drooping flowers; deep green foliage. **Pkt., 5c; ¼ oz., 25c**

Nigella

LOVE-IN-A-MIST, OR DEVIL-IN-THE-BUSH. —Compact growing, free flowering plants with curious looking, showy flowers and finely cut foliage. Hardy annuals. Mixed. **Pkt., 5c; ½ oz., 15c**



Nasturtiums

NASTURTIUMS are hardy annuals, of easy cultivation and flower best where the soil is not too rich. The new hybrids include various shades of rose, salmon, bright red, pale yellow, etc., either self-colored or spotted, mottled, striped and margined.

For covering trellises, fences, arbors, piazzas, trailing from vases, over rockwork, for bedding, etc., nothing can equal the gorgeous effect produced by their marvelous wealth of bloom, borne in uninterrupted splendor from early Summer until cut down by frost. The seeds, picked green and pickled in vinegar have a piquant, appetizing flavor that is a valuable addition to relishes or pickles.

DWARF NASTURTIUMS

CHAMELEON.—Variable colorings in bronze, crimson and yellow, rich markings.

CLOTH OF GOLD.—Brilliant scarlet, golden yellow leaves.

EMPRESS OF INDIA.—Intense scarlet, purplish green leaves.

PRINCE HENRY.—Lemon yellow, with carmine blotches.

RUBY KING.—Ruby red.

VESUVIUS.—A rich salmon orange, dark foliage.

PRICES:

NAMED VARIETIES.— Pkt., 5c; oz., 15c; ¼ lb., 40c

MIXTURE.—Of standard varieties.

Pkt., 5c; oz., 10c; ¼ lb., 30c

TALL NASTURTIUMS

COQUETTE.—Variable flowers marked and blotched in many brilliant colors.

KING THEODORE.—Large velvety crimson flowers, very attractive dark green leaves.

MOONLIGHT.—Soft primrose.

SUNLIGHT.—Large, bright golden yellow flowers.

PRINCE HENRY.—Fine lemon yellow, clear carmine blotches.

TWILIGHT.—Extra large light salmon, suffused rosy salmon.

PRICES:

NAMED VARIETIES.— Pkt., 5c; oz., 15c; ¼ lb., 30c; lb., $1.00

MIXTURE.—Of standard tall varieties.

Pkt., 5c; oz., 10c; ¼ lb., 25c; lb., 75c

LOBB'S CLIMBING

A distinct strain of tall Nasturtiums, flowering more freely than the standard varieties.

ASA GRAY.—Large, bright lemon flowers.

BLACK PRINCE.—Such a rich, dark maroon as to appear velvety black. Foliage very dark.

CROWN PRINCE OF PRUSSIA.—Rich, deep ruby garnet.

SPITFIRE.—Free-blooming, brilliant scarlet.

NAPOLEON.—Fine golden yellow, spotted brown.

IVY LEAF

TALL MIXED. — Climbing habit with pointed leaves of rich ivy green veined white, resembling English Ivy. Flowers have narrow petals and are quite distinct and pleasing.

Pkt., 5c; oz., 20c; ¼ lb., 50c

DWARF MIXED.—

Pkt., 5c; oz., 20c; ¼ lb., 60c

QUEEN VICTORIA.—Deep orange.

PRICES:

NAMED VARIETIES.—

Pkt., 5c; oz., 15c; ¼ lb., 40c

MIXTURE.—Of standard varieties Lobb's climbing.

Pkt., 5c; oz., 10c; ¼ lb., 30c; lb., $1.00

VARIEGATED

TALL MIXED.—Foliage beautifully marked and marbled yellow and cream on the green ground, some leaves appearing almost white. Flowers come in all colors and markings.

Pkt., 10c; oz., 25c; ¼ lb., 75c

DWARF MIXED.

Pkt., 10c; oz., 25c; ¼ lb., 75c

PANSIES

Fancy Strains of Mixed Pansies

TRIMARDEAU GIANTS.—Of remarkably large size and robust growth; very fine. Separate colors and mixed.

Pkt., 10c; ¼ oz., 60c; oz., $2.00

FINE MIXED.—A fine assortment of colors.

Pkt., 5c; oz., 25c

LARGE FLOWERING MIXED. — No pains are spared by our German grower to make this strain absolute perfection in form, firmness of texture, size, freedom of bloom, and elegance and variety of markings and colorings.

Pkt., 25c; ⅛ oz., 75c

MASTODON PANSIES
At the Panama Pacific Exposition

See Specials Below

Plants in Season See Plant Dept.

Mastodon Pansies

FOR years the Steele Pansy Gardens have grown our Giant Pansies and cooperated in securing the finest strains from the world's most celebrated growers. These have been carefully reselected and bred up to their present surpassing excellence, and for giant size, substance, form and coloring we have never seen Pansies to compare with them. Named varieties and special strains are grown separately and the seed collected by hand and carefully blended into what we believe to be the finest mixture ever offered.

MASTODON PANSY SEED, DIAMOND MIXED. PKT., 25c; TRADE PKT., $1.00

NEW FOR 1916—PANAMA-PACIFIC, MASTODON BRONZE AND MASTODON WHITE

PANAMA-PACIFIC.—A magnificent deep yellow, some with dark centers, some clear yellow. This was the wonderful Golden Yellow Pansy of which the special planting of 200,000 was made around the Palaces of the Panama-Pacific Exposition. **Pkt., 25c**

MASTODON BRONZE.—New. A giant strain of bronze pansies in all the different shades from burnished brass to gold. Wonderfully tinged with nearly every color known to pansies. The most popular pansy we have. **Pkt., 25c**

MASTODON WHITE.—Dark center. Magnificent new white of great beauty and substance and of true Mastodon form. **Pkt., 25c**

LARGE FLOWERING PANSIES

ADONIS.—A distinct and beautiful shade of light blue with white center and dark blotch, a most pleasing and attractive variety. **Pkt., 10c**

GOLDEN QUEEN.—A rich, pure yellow of the grandest form and size. A valuable addition to the yellows, which are very hard to produce in the Giant strains. **Pkt., 10c**

GIANT DARK BLUE.—A splendid blue black, very elegant, and of good substance; should be grown by everyone. **Pkt., 10c**

GIANT STRIPED.—A superior strain of truly giant pansies, with the most beautiful striped markings in the richest dark shades. Very popular in Europe. **Pkt., 10c**

PRINCE HENRY.—A new giant variety, of a brilliant, dark indigo blue, with violet luster, each petal having a large, dark brown, veined blotch. Edges of petals slightly ruffled. **Pkt., 15c**

MASTERPIECE -- GIANT RUFFLED.—The mammoth size, richness and beauty of colorings and frilled or ruffled character of the petals, make "Masterpiece" one of the most distinct and interesting Pansies ever developed. **Pkt., 25c**

MADAME PERRET.—A beautiful and distinct type with edges of petals frilled—bordered white, colors are dark wine—pink and red, beautifully veined. The earliest of the Giants, has sweetest perfume and keeps up its size of flower longer than any other. We offer the best strain. **Pkt., 15c**

SNOW FLAKE.—A grand, pure white, of extra fine quality. **Pkt., 10c**

VULCAN.—A magnificent new dark, glowing red with five large, black spots; blooms of perfect form and great substance; but its chief value lies in the superb coloring which has never been attained before. Be sure to try "Vulcan." **Pkt., 25c**

EMPEROR WILLIAM.—A dainty cornflower blue, very showy; a splendid variety of large size and good substance. **Pkt., 10c**

KING OF THE BLACKS (Giant).—Immense velvety black flowers of the finest quality; the largest and best black pansy. **Pkt., 10c**

ANNUAL FLOWER SEEDS—Continued

Perilla Nankinensis

Dark purple foliage plant. Half-hardy annual. **Pkt., 5c**

Petunia, Hybrida

Too much cannot be said in praise of the Petunia as a bedding plant. Our clear, bright Summers seem to bring out its best qualities. During the whole season it is covered with large, showy blossoms, which are always bright and fresh, in spite of heat and drouth. The flowers are of an almost infinite variety of colors and markings, and quite as varied in form; large and small, fringed and plain, double and single. Hardy annual. Large assortment.

Single Fine Mixed, **Pkt., 5c; ⅛ oz., 25c**

Single Choicest Mixed.—Saved from the best flowers. **Pkt., 10c; ⅛ oz., 50c**

Single Fringed Mixed.—Large flowered; very desirable. **Pkt., 25c**

Double Choicest Mixed.—Full and handsome. **Pkt., 25c**

Double Fringed Mixed.

GIANT CALIFORNIA.—Extra Select. Blotched and striped, fringed and ruffled. Mixed. **Pkt. ,25c**

Phlox Drummondi

The blooms of Phlox Drummondi are unrivaled for richness and beauty of color, ranging from white to the deepest scarlet and purple. They are abundant, almost covering the foliage and of long duration. Very desirable, and easily grown. For cutting for bouquets or for bedding in masses they are unsurpassed. Hardy annual, one foot high.

Choice Mixed, **Pkt., 5c; ¼ oz., 50c**

Large Flowering.—Flowers large and brilliant. Mixed. **Pkt., 5c; ¼ oz., 30c**

Large Flowering.—Scarlet or white. **Pkt., 5c; ¼ oz., 75c**

STAR PHLOX.—(Cuspidata.) Flowers have a distinctive star-like appearance, with white margins, excellent for bouquets. **Pkt., 10c; ¼ oz., 30c**

DWARF.—Mixed; finest flowering sorts. **Pkt., 10c; ¼ oz., 50c**

Poppy—Papaver

The Poppy is well known and really a magnificent flower which is borne separately on tall stalks. Poppies are very showy and come in many bright and charming colors. Some are hardy annuals, others are perennials, and may be sown as the ground can be prepared.

DOUBLE CARNATION FLOWERED.—Annual. Fringed; assorted colors. Mixed. **Pkt., 5c; oz., 25c**

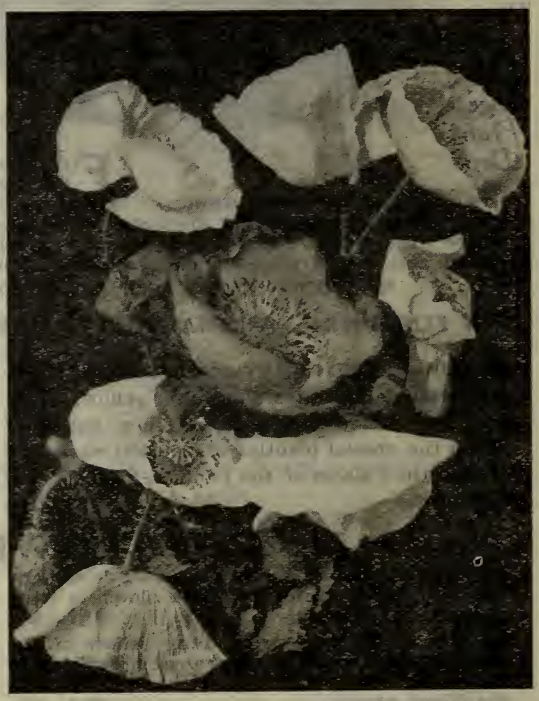
SHIRLEY.—Annual. The range of color, extending from white through delicate shades of pink, rose and carmine, to the deepest crimson; fine for cutting. Best single mixed. **Pkt., 10c; ½ oz., 25c**

MISS SHERWOOD.—Annual. Petals satiny white, shading to chamois rose. Very beautiful and distinct. **Pkt., 10c; ½ oz., 25c**

DOUBLE AMERICAN FLAG.—Annual. White, bordered with scarlet. **Pkt., 5c; oz., 30c**

UMBROSUM.—Annual. Rich vermilion, with a glossy black spot on each petal; single. **Pkt., 5c; oz., 30c**

KING EDWARD.—A new single annual variety, producing large flowers with great freedom. Color is deep scarlet, shaded crimson, red, with large black blotch. Height about 2 ½ ft. **Pkt., 10c; ¼ oz., 25c**



Shirley Poppies

Portulaca—Rose Moss

Brilliant dwarf annuals, only six inches high, luxuriating in warm situations, and blooming profusely from early Summer to Autumn. For low beds and masses of color from Spring until frost, they are indispensable; colors range through innumerable shades of red, yellow, pink, white, striped, etc.

Single Mixed, **Pkt., 5c; ¼ oz., 20c**
Double Mixed, **Pkt., 10c; 1/16 oz., 25c**

Rhodanthe—Swan River Everlasting

A beautiful everlasting annual for garden or pot culture; height, 1 ft.; mixed colors. **Pkt., 5c**

☞ ANNUAL and PERENNIAL Border and Bedding Plants. A select list of the most desirable varieties.—Plant Dept., Pages 122 to 134.

TO MAKE AND KEEP **A Good Lawn**
YOU NEED **A Lawn Roller**

We carry both "WATER WEIGHT" and CAST IRON ROLLERS. See page 86.

☞ **"KALIF COLLECTION" of 7 Splendid DAHLIAS for Garden Decoration or Cut Flowers**—See Color Plate, Page 68

For Complete List of Finest Dahlias See Pages 114-119

ANNUAL FLOWER SEEDS—Continued

Salpiglossis

Salpiglossis—Pointed Tongue

Produces very showy, funnel-shaped flowers of large size. Fine for beds. Half-hardy annuals.

DWARF.—Fine Mixed. **Pkt., 5c; ¼ oz., 25c**

GRANDIFLORA.—Mixed. Large flowering. **Pkt., 10c; ¼ oz., 35c**

Salvia—Flowering Sage

Very ornamental; flowers borne in spikes of fiery red or crimson, and continue in bloom in open ground until after severe frosts. Start in heat and transplant into light soil, one to two feet apart. Excellent for bedding in masses or single planting. Hardy annuals.

SALVIA ZURICH.—New Dwarf Early. The finest of all Dwarf Salvias. Very floriferous. **Pkt., 15c; ⅛ oz., $1.00**

SALVIA SPLENDENS.—Brilliant scarlet. **Pkt., 10c; ¼ oz., 50c**

BONFIRE--(Clara Bedman).—One of the finest Salvias ever introduced; compact bush about two feet in height and diameter. Its erect spikes of flowers of brilliant scarlet stand clear above the dark green foliage and completely cover the plant. **Pkt., 15c; ¼ oz., $1.00**

Saponaria

Pretty, dwarf bedding plant. Red, white and scarlet flowers. Hardy annuals.

Fine Mixed, **Pkt., 5c; ½ oz., 20c**

Scabiosa

SWEET SCABIOUS, or Mourning Bride.—Free-flowering annuals; colors, white, carmine, lilac, maroon, etc. Very effective for garden decoration and valuable for cutting.

DWARF or TALL DOUBLE Mixed, **Pkt., 5c; ¼ oz., 15c**

Schizanthus—Butterfly Flower

Beautiful, garden annuals, flowers charmingly fringed and delicately colored; one to two feet.

Mixed Colors, **Pkt., 5c; ¼ oz., 25c**

Statice—Sea Lavender

Beautiful for Winter bouquets; flowers very pretty.

ANNUAL VARIETIES.—Mixed. **Pkt., 5c**

Stocks—Double Ten Weeks

These popular flowers are easily grown, and are so highly fragrant and of such beauty that they deserve a place in every garden. They are great improvements over the Gilliflowers of the olden times, being much larger and more densely double and of a great variety of colors.

DWARF LARGE FLOWERING.—White, scarlet, rose, light blue, or mixed. **Pkt., 10c; ⅛ oz., 50c**

EMPEROR, or Perpetual.—Mixed. **Pkt., 10c; 1/16 oz., 50c**

VIRGINIAN STOCK.—A fine, early flowering plant. Hardy annual.

Mixed, **Pkt., 5c; ¼ oz., 15c**

Sunflower—Helianthus

Stately growing annuals with immense golden yellow flowers; effective for garden decoration.

DOUBLE DWARF.—Covered with three-inch double flowers of brightest golden yellow. **Pkt., 5c; oz., 25c**

GLOBOSUS FISTULOSUS.—Saffron, very large, double and handsome. **Pkt., 5c; oz., 25c**

MULTIFLORA.—Beautiful, double yellow flowers. **Pkt., 5c; oz., 25c**

Thunbergia—Black Eyed Susan

Rapid-growing annual climbers; splendid for trailing over trellises, fences, etc., beautiful flowers borne in profusion; buff, white, orange, etc., four to six feet high.

Mixed Colors, **Pkt., 5c; ¼ oz., 25c**

Verbena

Very few annuals will make such a gorgeous display during the Summer months, or furnish more flowers for cutting, than the Verbena. Start seed in the house or under glass early in the Spring and transplant after three or four inches of growth. They flower in July and continue strong and healthy until destroyed by frost.

HYBRIDA CHOICEST MIXED.—Very finest. **Pkt., 10c; ¼ oz., 50c**

MAMMOTH MIXED.—Selected; extra large, fine. **Pkt., 15c; ¼ oz., 75c**

FINE MIXED. **Pkt., 5c; ¼ oz., 35c**

CANDIDISSIMA.—Pure white. **Pkt., 10c; ¼ oz., 50c**

SCARLET DEFIANCE.—Fiery scarlet. **Pkt., 10c; ⅛ oz., 50c**

PINK SHADES. **Pkt., 10c; ¼ oz., 50c**

COERULEA.—Bright blue. **Pkt., 10c; ¼ oz., 50c**

Viscaria—Rose of Heaven

Their profuseness of bloom will always rank them among general favorites.

Fine Mixed, **Pkt., 5c; ¼ oz., 15c**

Zea—Ornamental Maize

JAPONICA VARIEGATA.—Finest Mixed. All varieties. **Pkt., 5c; oz., 20c**

GRACILLIMA MIXED. **Pkt., 5c; oz., 20c**

Zinnia Elegans—Youth and Old Age

Of the easiest cultivation and should be in every collection. Half hardy annuals.

TALL DOUBLE MIXED. **Pkt., 5c; ¼ oz., 25c**

DWARF DOUBLE MIXED. **Pkt., 5c; ¼ oz., 25c**

CRISPA, CRESTED MIXED. **Pkt., 10c; ¼ oz., 35c**

PERENNIAL FLOWER SEEDS

Biennials are listed herewith as they are in their perfection the second year.

HARDY PERENNIALS are used for permanent garden and landscape effects, and many of them also produce choice cut flowers. The old fashioned perennials are in high favor now for Beds and Borders and the new and improved varieties are wonderful advancements over the older types. Most Perennial and Biennial Plants do not flower until the second year and for immediate results one year old plants of all the most desirable sorts can be furnished. **See plant department.**

Agrostemma

CORONARIA.—Strikingly beautiful for beds, ribbons and borders. Its graceful, pink-like flowers remain fresh a long time after being cut, and are very handsome in bouquets. Thrives in any soil.
Perennial, **Pkt., 5c**

Alyssum

SAXATILE.—Showy, bright yellow flowers, blooms the first season if sown early indoors.
Pkt., 5c; ¼ oz., 20c

Anchusa—Italica

DROPMORE.—A splendid plant for hardy borders, growing to a height of about 5 ft. Remarkable for its free and continuous flowering habit. Flowers are of a beautiful gentian-blue color. **Pkt., 15c**

Antirrhinum—Snapdragon

One of the most useful and showy of border plants of almost every color, and striped as beautifully as Carnations. They have recently been much improved and are now really magnificent. Hardy perennial.
Grandiflora—Tall.
Three Splendid Novelties
FIREFLY.—Scarlet and white.
Pkt., 10c; ¼ oz., 50c
QUEEN VICTORIA.—New large; pure white.
Pkt., 10c; ¼ oz., 50c
VENUS.—Pink, on white ground; white throat.
Pkt., 25c; ⅛ oz., $1.00

OTHELLO.—Rich, dark maroon, having a satin-like sheen instead of velvety surface as most varieties. **Pkt., 25c; ⅛ oz., $1.50**
LUTEUM.—Yellow. **Pkt., 25c; ⅛ oz., $1.50**
TALL, FINEST MIXED. Pkt., 10c; ¼ oz., 25c
DWARF, FINEST MIXED. Pkt., 5c; ¼ oz., 25c

Arabis—Rock Cress

One of the earliest and prettiest Spring flowers, unequalled for rockeries or edging, withstands the drought, pure white flowers.
ALPINA **Pkt., 5c**
ALPINA GRANDIFLORA SUPERBA.— (New.)
Pkt., 10c

Asparagus Sprengeri—Emerald Feather

One of the best of the new so-called ferns. Feathered foliage; useful for bouquets, wreaths or sprays, remaining perfect for weeks after cutting. Grows freely the whole year round. **(For plants see Plant Department.)**
Pkt., 10c; 50 seeds, 25c

Asparagus Plumosus—Asparagus Fern

One of the prettiest house plants. The leaves are bright green, gracefully arched, surpassing Maidenhair Ferns in grace, delicacy of texture and richness of color. **(For plants see Plant Department.)** **Pkt., 25c; 50 seeds, 50c**

Asters—Hardy Perennial—(Michaelmas Daisy)

Handsome flowers of easy culture, that appear at a time when flowers are scarce. Make an attractive garden display and are very useful as cut flowers.
Large flowering mixed. **Pkt., 10c**

Begonia

Begonias are among the most beautiful of flowering plants, especially adapted to pot culture. Try our select seed; the finest in the world.
REX.—Ornamental leaved varieties.
Mixed, **Pkt., 25c**
INTERNATIONAL PRIZE.—Single mixed.
Pkt., 25c
DOUBLE TUBEROUS ROOTED. — Finest strain. **Pkt., 25c**

Calceolaria

Calceolaria

Very handsome and much admired. Produces a profusion of beautiful flowers of unique form and colorings. Fine for pot culture.
HYBRIDA.—Finest mixed. **Pkt., 50c**

Calla

DEVONIENSIS.—A fine Calla that will bloom from seed in one year. For Calla Bulbs, see Plant Department.
Pkt., 15c; 25 seeds, 50c
AETHIOPICA.—The well-known "Lily of the Nile." **Pkt., 15c**

Candytuft

SEMPERVIRENS.—Perennial. White.
Pkt., 10c; ¼ oz., 25c

Canna—Indian Shot

Ornamental, tropical looking plants of easy culture; large and beautiful flowers. Hardy perennial. For Canna Bulbs, see Plant Department.
CROZY'S NEW LARGE FLOWERING MIXED,
Pkt., 10c; oz., 25c
NEW FRENCH AND GERMAN VARIETIES, MIXED, **Pkt., 10c; oz., 25c**

Canterbury Bells—Campanula

Very ornamental garden plants of the easiest culture; hardy biennial, two and a half feet high, producing large, nodding and charming bell-shaped flowers of many exquisite shades.
Single Mixed, **Pkt., 5c; ¼ oz., 25c**
Medium Double Mixed, **Pkt., 10c; ¼ oz., 50c**
CALYCANTHEMA.—(Cup and Saucer.) White rose, lilac, blue or mixed. **Pkt., 5c; ¼ oz., 50c**
PERSICIFOLIA.—Hardy perennial; very fine, blooms in June. Mixed. **Pkt., 15c; ¼ oz., 50c**
DIAMOND MIXTURE.—Finest sorts; all colors, single and double. **Pkt., 10c; ¼ oz., 50c**

PERENNIAL FLOWER SEEDS—Continued

Carnation—Dianthus Caryophyllus

Carnations are Tender Perennials, being easily Winter killed.

Universally admired, deliciously fragrant. There is no more satisfactory flower to grow and few that are as lasting. The seed we offer is the finest obtainable and our new strains of perpetual flowering carnations will bloom the first year. *FINE PLANTS IN SEASON. SEE PLANT DEPARTMENT.*

CHABAUD EVERBLOOMING.—Flowers in five to six months from sowing.

Extra Select, Double White, Red or Yellow. **Pkt., 15c**

Extra Choice Double Mixed. **Pkt., 15c**

Fine. Double Mixed. **Pkt., 10c**

AMERICAN MIXED.—Finest new varieties. Extra choice. **Pkt., 25c**

GRENADIN.—Scarlet; charming double scarlet, dwarf and compact; very early, free flowering; especially fine for borders. **Pkt., 15c; ⅛ oz., 75c**

Margaret Carnations

Bloom in four months from seed. Separate colors, white, yellow, dark red, mixed.

Pkt., 10c; ⅛ oz., 30c

Chrysanthemum

FRUTESCENS--(Marguerite, or Paris Daisy).—Beautiful for cutting and pot culture, long stemmed single white flower with golden center. **Pkt., 10c; ¼ oz., 25c**

Cineraria

Magnificent and indispensable flowering plants for the window garden. The flowers of white, blue, violet and crimson shades, covering the plant with a sheet of bloom.

HYBRIDA.—Grandiflora, prize mixed. Extra choice. **Pkt., 50c**

HYBRIDA.—Fine mixed. **Pkt., 15c**

DUSTY MILLER--(Maritima Candidissima). Beautiful silvery-leaved border plant; half hardy perennial. **Pkt., 5c; ¼ oz., 25c**

Clianthus Dampieri—Glory Pea

A fine pot plant, bearing clusters of curiously-shaped and very brilliantly-colored flowers, scarlet with black center; half hardy perennial. **Pkt., 20c**

Coleus

Probably the best known and most popular of ornamental foliage plants. Leaves of all shades and colors. Tender perennial.

HYBRID MIXED. **Pkt., 15c**

EXTRA CHOICE MIXED.—(Benary) **Pkt., 25c**

Columbine—Aquilegia

Universal favorite for hardy borders and beds.

CANDIDISSIMA.—Large snowy white. **Pkt., 15c; 1/16 oz., $1.00**

COERULEA.—Hybrid Mixed. **Pkt., 10c; ⅛ oz., 75c**

ROSE QUEEN. **Pkt., 15c; 1/16 oz., $1.00**

COERULEA.—Fl. Plena (double). Splendid blue. **Pkt., 15c; ¼ oz., $1.00**

CHRYSANTHA.—Golden Yellow. **Pkt., 10c; ¼ oz., 50c**

GLANDULOSA VERA.—Deep blue with white carolla. Very free flowering. **Pkt., 15c; 1/16 oz., $1.50**

Coreopsis

LANCEOLATA. — Large, showy, bright yellow flowers produced in great abundance from June till frost, fine for cut flowers. **Pkt., 10c; ¼ oz., 25c**

Cyclamen

Beautiful Winter and Spring flowering plants for the window and greenhouse. Not only are the flowers of striking beauty, but the foliage is also highly ornamental. The colors range through shades of pink, crimson, white, spotted, etc. Delicately fragrant. Bulbs in season.

GIGANTEUM HYBRIDUM.—White, dark red, salmon pink or mixed. **Pkt., 25c**

PAPILIO--BUTTERFLY.—Mixed. **Pkt., 25c; 100 seeds, $1.00**

Coreopsis

Daisy—Bellis Perennis

A well-known and popular low-growing plant bearing beautiful flowers. Hardy perennial.

LONGFELLOW.—Double Pink. **Pkt., 15c; 1/16 oz., 40c**

GIANT DOUBLE.—White, Red or Mixed. **Pkt., 15c; 1/16 oz., 40c**

DOUBLE QUILLED.—Red. **Pkt., 25c; 1/16 oz., 60c**

SHASTA ALASKA.—Very hardy; profuse bloomsers; flowers very large and borne on long stems ingle; petals pure glistening white; dark center.; **Pkt., 15c**

PERENNIAL FLOWER SEEDS—Continued

Eschscholtzia—California Poppy

Dahlia

A magnificent, Fall-blooming tuberous-rooted plant, which can be readily started from seed.

Double Mixed, **Pkt., 10c; ¼ oz., 60c**

Single Mixed, **Pkt., 10c; ¼ oz., 35c**

CACTUS.—Flowers odd and fantastic in shape; all colors.
Double Mixed, **Pkt., 20c; ⅛ oz., 50c**

TWENTIETH CENTURY.—New single Dahlias of recent introduction; flowers large and handsome. **Pkt., 10c; ⅛ oz., 25c**

NEW SEMI-DOUBLE GIANT PEONY-FLOWERED. **Pkt., 20c; ⅛ oz., 50c**

Datura

Large, strong-growing plants, trumpet-shaped flowers, white, sometimes tinted with blue. Roots can be preserved in the cellar, like Dahlias.

FASTUOSA HUBERIANA.—Double mixed. **Pkt., 5c; oz., 50c**

CORNUCOPIA.—Very fragrant. **Pkt., 5c**

Delphinium—Larkspur

A very ornamental class of profuse blooming plants. Their tall spikes of many-colored flowers produce a striking effect when planted in groups.

PERENNIAL MIXED.—Single. **Pkt., 5c; ¼ oz., 20c**

CHINESE AZUREUM.—Single blue; fine for cutting. **Pkt., 10c; ¼ oz., 30c**

Digitalis—Fox Glove

A tall growing biennial, with large leaves and spikes of vari-colored and spotted flowers. A magnificent plant. Fine for borders or background. Easily grown. Mixed or white. **Pkt., 5c; ¼ oz., 25c**

Dracaena

Ornamental greenhouse plant. Very desirable.

INDIVISA LINEATA.—Narrow, dark foliage. **Pkt., 10c**

Forget-me-not—Myosotis

Beautiful Spring favorites, of easy growth, bearing clusters of lovely, small flowers. They are hardy enough to remain in the open ground except in very cold latitudes. Fine for borders and shady situations.

ALPESTRIS.—Of trailing habit, with pretty flowers. Blue or mixed. **Pkt., 5c; ¼ oz., 25c**

VICTORIA.—Flowers large, bright azure blue; fine for borders and pots. **Pkt., 10c; ⅛ oz., 25c**

SEMPERFLORENS.—Dwarf; continuous bloomer; blue. **Pkt., 10c; ⅛ oz., 50c**

Edelweiss—Leontopodium Alpinum

The true white-leaved Edelweiss of the Alps, 6 inches tall. **Pkt., 25c**

Eschscholtzia—California Poppy

These are among our most beautiful and popular perennials, although often grown as annuals; being of the easiest culture and giving great satisfaction. They commence to bloom within a few weeks' time from Spring-sown seed and continue to flower profusely until late in the Autumn, forming nice, bushy plants, one foot high.

SINGLE WHITE OR MIXED, Pkt., 5c; oz., 35c

GOLDEN WEST.—Yellow with orange center—flowers large. **Pkt., 10c., oz., 50c**

BURBANK'S CRIMSON. **Pkt., 10c; oz., 75c**

CARMINE KING. **Pkt., 5c; oz., 50c**

MANDARIN.—Inner side of petals rich orange, outer side brilliant scarlet; very striking; single. **Pkt., 5c; oz., 40c**

DOUBLE MIXED. **Pkt., 10c; ¼ oz., 50c**

(For other sorts see Poppies.)

Gentiana

Fine, showy flowers. Should be in every flower garden. Hardy.

ACAULIS. **Pkt., 5c**

Geranium

A half-hardy perennial, easily and quickly grown from seed.

ZONALE.—Extra choice, single mixed, large flowering. This is the well-known bedding Geranium. **Pkt., 10c**

ZONALE.—Choice Double Mixed. Very finest and newest sorts. **Pkt., 25c**

LADY WASHINGTON.—(Pelargonium.) Foliage green; flowers large, handsome, oddly marked; fine for pot culture. Finest mixed. **Pkt., 25c**

Gerbera Hybrids—Jamesonii—Transvaal Daisy

The plants are hardy and as vigorous growing as the original type, producing flowers which include a wonderful range of brilliant colors. **Pkt., 25c**

Geum—Chiloense

Hardy perennial. Free-blooming plants. Fine for bouquets.

SCARLET, DOUBLE. **Pkt., 5c**

Gaillardia—Blanket Flower

Exceedingly beautiful, showy plants, one to two feet high. Grown in masses they are especially effective; large flowers, two or three inches across, produced from early Summer until frost; unrivaled for cutting. Also see Annuals.

GRANDIFLORA MAXIMA.—Perennial. Golden. **Pkt., 10c; ¼ oz., 25c**

Gloxinia

Most charming, greenhouse plants of dwarf habit. Their flowers are produced in greatest profusion, and of the most exquisite and gorgeous colors, many of which are magnificently spotted, mottled and blended. Under the commonest culture they bloom continuously for months.

HYBRIDA GRANDIFLORA.—Splendid mixture of finest varieties. **Pkt., 25c**

ROBUSTA.—Erect, hardy, superb mixture. **Pkt., 25c**

Grevillea Robusta—Silk Oak

Very beautiful and graceful foliage plant with fern-like foliage—a splendid pot plant. **Pkt., 10c**

PERENNIAL FLOWER SEEDS—Continued

Gypsophila—Baby's Breath

A pretty, free-flowering plant. Fine for bouquets.

PANICULATA.—Foliage fine; covered with tiny pure white flowers. Hardy, perennial. **Pkt., 5c; ¼ oz., 15c**

REPENS.—Dwarf white, for rock-work. **Pkt., 10c; ¼ oz., 25c**

Hollyhock, or Althaea

The modern Hollyhock is quite different and much more beautiful than the plant of twenty years ago, being much more compact in growth; the flowers are larger, richer colored, and the double varieties are fuller and of better form. For a background to a flower garden there can be nothing better. Hardy perennials; five feet high.

ALLEGHENY.—A popular variety with very large flowers; petals beautifully fringed and crinkled; coloring rich and attractive. **Semi-Double Choice Mixed. Pkt., 10c; ¼ oz., 50c**

CHATERS.—Superb Strains.

Double varieties of greatest perfection. **Scarlet, Rose, Pink, Lavender, Maroon, Yellow, White, Mixed, Pkt., 10c; ¼ oz., 60c**

Heliotrope—Cherry Pie

Delightfully fragrant, free-blooming, tender, perennial plants. Splendid for bedding or pot culture. One foot high; of spreading habit. The fragrance of its flowers cannot be excelled in exquisite delicacy. Invaluable for bouquets.

CHOICE MIXED. Pkt., 10c; ⅛ oz., 25c

MAMMOTH FLOWERED.—Blue, white or mixed, very fine. **Pkt., 15c; ⅛ oz., 50c**

Kudzu Vine—Pueraria Thunbergia

Beautiful Japan climber, hardy perennial with fragrant purplish-violet, wisteria-like flowers. **Pkt., 10c; ¼ oz., 50c**

Lantana

A free-flowering shrubby plant, suitable for out-door or pot culture. The flowers emit an agreeable odor and are of many shades of purple, orange and white. Half-hardy perennial.

HYBRIDA FINE MIXED. Pkt., 10c; ¼ oz., 25c

Lemon Verbena

Every garden should have a few plants of this fragrant favorite. Its pale green foliage goes well with any flower. **Pkt., 10c**

Linum—Crimson Flax

PERENNIAL.—Mixed. **Pkt., 5c; oz., 35c**

Lobelia

CARDINALIS.—Flowers rich red; dark green foliage. Especially valuable for border decoration. **Pkt., 10c; ⅛ oz., 50c**

Lupinus

Shrubby plants, bearing long spikes of various colored flowers.

PERENNIAL.—Mixed. **Pkt., 5c; oz., 30c**

Lychnis

ROSE CHAMPION--JERUSALEM CROSS.—There are few plants that produce more brilliantly colored blossoms than Lychnis. They are borne in clusters and continue fresh and brilliant for a long time. Hardy perennials, one to three feet high.

HAAGEANA HYBRIDA.—Mixed. **Pkt., 10c; ⅛ oz., 25c**

Mimulus

MOSCHATUS, or Musk Plant.—Cultivated for its rich, musky odor. Should have a rich soil and ample moisture. Hardy perennial. **Pkt., 10c**

TIGRINUS NANUS, or Monkey Flower.—Mixed, beautifully spotted, all colors. **Pkt., 10c**

Oenothera—Evening Primrose

Elegant for growing in an exposed position, in border or on rockery; constant bloomer all summer. Fine mixed. **Pkt., 5c; ¼ oz., 25c**

Pampas Grass—Gynerium Argenteum

A noble ornamental grass, easily grown from seed, producing majestic plumes that are invaluable for Winter decorations. **See Plant Dept. Pkt., 5c**

Passiflora—Passion Flower

Most interesting and well-known climbers, bearing singularly beautiful flowers. **Mixed, Pkt., 10c**

Poppies—Perennial

BRACTEATUM.—Hardy perennial; very showy red. **Pkt., 5c; ¼ oz., 20c**

ICELAND, or Nudicaule.—These are of a very graceful, neat habit, with bright green, fern-like foliage, formed in tufts, from which issue slender stalks about 12 inches in height, bearing yellow, white or orange-scarlet flowers in endless profusion and most useful for cutting; hardy perennial. Mixed colors. **Pkt., 10c; ¼ oz., 25c**

ORIENTAL.—Hybrida mixed. Very hardy and early flowering. **Pkt., 15c; ¼ oz., 50c**

Pentstemon—Beard Tongue

Beautiful, hardy, perennial, herbaceous plant with extremely brilliant blooms. Their bells shaped flowers are borne on long spikes, and are produced abundantly all Summer. **Mixed, Pkt., 5c**

Phlox Decussata—Perennial

Hardy, perennial; mixed. **Pkt., 10c; ⅛ oz., 50c**

Peas—Perennial—Lathyrus Latifolius

In general appearance these are the same as Sweet Peas, but the flowers are not so fragrant; they bloom through a long season, are perfectly hardy, and will live for years. **Red, White, or Mixed, Pkt., 10c; oz., 35c**

Pink—Dianthus

The Dianthus family embraces some of the finest of all flowering plants. The blooms are of the richest and most pleasing colors, and nothing can surpass the exquisite fragrance of some varieties. They are hardy, and become perennial in warm climates.

CHINENSIS.—Single mixed. **Pkt., 5c; ¼ oz., 15c**

CHINENSIS.—Double mixed. **Pkt., 5c; ¼ oz., 25c**

HEDDEWIGII.—Single mixed. Color varies from richest velvety crimson to delicate rose. **Pkt., 5c; ¼ oz., 25c**

HEDDEWIGII.—Double mixed. Large flowering splendid. **Pkt., 10c; ¼ oz., 50c**

HEDDEWIGII DIADEMATUS FIREBALL.—Extra double brilliant dark scarlet. Very beautiful. **Pkt., 10c; ¼ oz., 50c**

HEDDEWIGII DIADEMATUS.—Double Diadem Pink. Extra fine. **Pkt., 5c; ¼ oz., 35c**

HEDDEWIGII DIADEMATUS ALBUS.—Double white. **Pkt., 10c; ¼ oz., 50c**

HEDDEWIGII LACINIATUS.—Fine single and double, fringed, finest assorted colors. **Pkt., 10c; ¼ oz., 50c**

PLUMARIUS SCOTICUS.—Double perennial, large flowered, mixed. **Pkt., 10c; 1,000 seeds $1**

PERENNIAL FLOWER SEEDS—Continued

Phormium—New Zealand Flax

TENAX.—Has handsome, variegated foliage. **Pkt., 10c; ¼ oz., 50c**

Primula—Primrose

The first three varieties named below are hardy, early blooming garden plants, and the others beautiful, Winter blooming house plants. Their various forms and blending of colors are exceedingly pleasing and effective. They thrive best in a sandy loam and leaf mold.

POLYANTHUS.—Early blooming, dwarf growing plants. Valuable for outdoor bedding. Mixed colors. **Pkt., 10c; ⅛ oz., $1.00**

VULGARIS.—Yellow, common, English Primrose. **Pkt., 10c; ¼ oz., $1.00**

JAPONICA, or Japanese Primrose.—The beautiful, large, various colored flowers stand in whorls, pyramidically arranged on short flower stems one foot high; though perennial, new plants flower more freely, and seeds should be sown every year. Mixed varieties. **Pkt., 15c; ⅛ oz., $1.00**

SINENSIS, or Chinese Primrose.—The beautiful, large fringed flowers stand in pyramids arranged on short flower stems. Blossoms of every shade of color, from pure white to deep crimson, and even deep blue; especially fine for Winter and Spring flowers in the house; easily grown; free bloomers. Finest mixed. **Pkt., 25c; 1/32 oz., $2.00**

SINENSIS.—Pure white or red. **Pkt., 25c**

SINENSIS, ALBA.—New; finest large white with yellow eyes. **Pkt., 50c**

SINENSIS.—Double finest mixed. **Pkt., 50c**

OBCONICA GRANDIFLORA.—A lovely profuse bloomer, bearing beautiful single flowers. This is really an ever-blooming plant, producing elegant clusters of flowers continuously throughout the year. **Pkt., 10c; 1/16 oz., $1.50**

Pyrethrum

Very ornamental plants, for both foliage and flowers.

PARTHENIUM AUREUM, or Golden Feather.—Beautiful, gold leaved, flower white. **Pkt., 10c; ¼ oz., 25c**

SELAGINOIDES.—Fine, fern-leaved sort; flowers bright golden yellow. **Pkt., 10c; ¼ oz., 35c**

Rudbeckia—Golden Glow

NEWMANI.—Brilliant orange yellow petals around a large dark center. A beautiful and useful perennial for borders or as a single group. **Pkt., 15c**

FULGARIS.—Orange yellow. Perennial. **Pkt., 15c**

LACINIATA.—Fl. Pleno. Golden yellow. **Pkt., 25c**

Smilax—Medeola Asparagoides

Charming, tender, perennial climber for greenhouse or window gardens. The foliage and stems are of pleasing light green; very graceful; excellent for decoration. (See Plants.) **Pkt., 10c; ¼ oz., 25c**

Snapdragon—See Antirrhinum

Statice—Sea Lavender

Splendid for border or rockery, producing panicles of minute flowers, can be dried and used for Winter bouquets. Mixed. **Pkt., 10c**

Stipa Pennata—Feather Grass

Delicate white, feathery bloom, flowering the second season, 2 feet. **Pkt., 10c**

Stocks—Winter or Brompton

BEAUTY OF NICE.—Very large flowers of a delicate flesh pink. Extra fine. **Pkt., 15c; ⅛ oz., 75c**

CRIMSON KING.—Rich blood crimson. **Pkt., 15c**

MONT BLANC.—Purest white. **Pkt., 15c**

MONTE CARLO.—Canary yellow. **Pkt., 15c**

QUEEN ALEXANDRA.—Soft rosy lilac. **Pkt., 15c**

VIOLET.—Mixed. **Pkt., 10c; 1/16 oz., 50c**

Sweet Rocket—Hesperis

An old, hardy garden favorite. Fragrant white flowers; 2 to 3 feet. **Pkt., 5c; ¼ oz., 15c**

SWEET SULTAN.—See Centaurea.

Sweet William—Dianthus Barbatus

A well-known, remarkably free-flowering plant of brilliant colors, ranging from snow white to darkest crimson and purple. They emit a very delicate and refreshing fragrance. Hardy perennial.

SINGLE MIXED.—Very beautiful. **Pkt., 5c; ½ oz., 25c**

DUNNETTI.—Dark crimson, single. **Pkt., 5c; ½ oz., 30c**

PURE WHITE.—Single. **Pkt., 5c; ½ oz., 30c**

DOUBLE MIXED. **Pkt., 10c; ½ oz., 50c**

Tritoma

Sometimes called Red Hot Poker. This is a fine, handsome plant. It is hardy, though requiring some protection through the Winter. The flowers are produced in large spikes of brilliant rich colors. Cut flowers keep a long time. Half-hardy perennial.

UVARIA.—Dazzling orange red. **Pkt., 15c**

Valeriana—Garden Heliotrope

Fine border plants; sweet scented flowers.
Fine Mixed, **Pkt., 5c; ¼ oz., 20c**

Vinca—Old Maid

Tender perennial. Fine for pot culture. Flowers white and pink.
Mixed, **Pkt., 10c; ¼ oz., 30c**

Violet

VIOLA ODORATA is the well-known English Violet, a free-flowering, hardy perennial. Easily grown from seed, though somewhat slow in germinating succeeds best in partially shaded moist places.

THE CZAR.—Finest forcing Violet. Very large. Dark blue. **Pkt., 15c; ⅛ oz., $1.00**

ODORATA BLUE.—Very fragrant. **Pkt., 10c; ⅛ oz., 50c**

ODORATA WHITE.—Very fragrant. **Pkt., 10c; ⅛ oz., 50c**

ODORATA.—Finest mixed. **Pkt., 10c; ⅛ oz., 75c**

Wall Flower—Cheiranthus Cheri

Produces spikes of beautiful, exceedingly fragrant flowers. Half-hardy perennials.

CLOTH OF GOLD.—Large, fine, single. **Pkt., 10c; ¼ oz., 35c**

GOLIATH.—Single, extra large, fine dark brown, very early; fine for forcing. **Pkt., 10c; ¼ oz., 50c**

MIXED, SINGLE.—Large flowering. **Pkt., 5c; ¼ oz., 25c**

PARISIAN FORCING.—Single. **Pkt., 10c; ¼ oz., 25c**

FINEST DOUBLE MIXED.—Branching. **Pkt., 10c; ⅛ oz., 75**

CLASSIFICATION OF FLOWERS

This will enable you to tell at a glance what flowers are suitable for any position.

Annual Bedding Plants or Tall Border Plants 1 to 2 feet

Ageratum, Tall.....blue, white or mixed.
Asters.....various colors.
Balsam.....various colors.
Brachycome.....blue, white, rose.
Browallia.....blue and white.
Calendula.....mixed.
Candytuft.....various colors.
Celosia.....crimson.
Centaurea.....yellow, rose.
Chrysanthemum.....yellow, white, gold.
Clarkia.....pink, scarlet.
Eschscholtzia (California poppy) crimson, white, yellow.
Four O'Clock.....various colors.
Gaillardia.....orange, scarlet.
Gilia.....white, lilac, rose.
Godetia.....variegated rose and white.
Gypsophila (for boquets).....white.
Linum (scarlet flax).....scarlet.
Marigold.....yellow, red, brown and variegated.
Mignonette.....white, yellow, red.
Nasturtium, dwarf.....various colors.
Nigella (Love in a mist)
Petunia.....various colors.
Poppy.....various colors.
Phlox.....various colors.
Scabiosa.....white, lilac, carmine and maroon.
Schizanthus.....various colors.
Salvia.....scarlet.
Stocks (10 weeks).....all colors.
Viscaria.....various colors.
Zinnia.....various colors.

Everlasting Flowers

Acroclinium.....all colors.
Globe Amaranth, Gompherena.....various colors.
Helichrysum.....various shades.
Rhodanthe.....pink, white.
Statice.....white, blue and yellow.

Tall Growing Plants for Grouping--Annual From 2 ½ ft. up

Amaranthus.....scarlet.
Calliopsis.....yellow, brown, maroon.
Castor Bean.....
Cosmos.....white, red, pink.
Euphorbia.....
Kochia.....
Larkspur.....various colors.
Nicotiana.....white.
Rudbeckia.....yellow.
Salpiglosis.....various colors.
Scabiosa Grandiflora.....all colors.
Sunflower.....yellow.

Low Edging Plants--Annual

Ageratum Dwarf.....blue, white or mixed.
Alyssum.....white.
Bulbs.....all colors.
Calliopsis, Tiger Star.....reddish brown.
Candytuft.....various colors.
Celosia, Dwarf.....
Centaurea, Dusty Miller.....
Dianthus.....various colors.
Lobelia Compacta.....blue.
Mignonette.....white, yellow, red.
Nemophila.....blue.
Pansy.....all colors.
Portulaca.....yellow, pink, white, scarlet.
Verbena.....various colors.

Climbing Vines--Annual

Balloon Vine.....white.
Scarlet Runner Bean.....scarlet.
Canary Bird Vine.....yellow.
Cypress Vine.....
Gourds.....
Moonflower.....white.
Morning Glory.....
Nasturtium, Tall.....various colors.
Sweet Peas.....all colors.
Wild Cucumber.....

Bedding Plants—Perennial—1 to 2 ft. high.

Agrostema.....pink.
Aster.....various colors.
Begonia.....various colors.
Calceolaria.....various shades and colors.
Calla
Candytuft.....all colors.
Carnation. yellow, white, red, pink and variegated.
Cineraria.....various colors.
Coleus
Columbine.....yellow, violet, rose.
Daisy (Shasta).....white.
Gaillardia.....yellow, orange, scarlet.
Geum.....scarlet.
Linum.....various colors.
Lychnis.....scarlet.
Pentstemon.....various colors.
Salvia.....scarlet.
Statice.....white, blue, yellow.
Stocks (perpetual).....all colors.
Sweet William.....various colors.
Tritoma.....orange, red.
Vinca.....white, rose.
Wallflower.....various colors.

Low Edging Plants--Perennial, 6 to 12 in. high

Alyssum Saxatile.....yellow.
Anemone.....various colors.
Pinks.....various colors.
Daisy, English.....various colors.
Edelweiss
For-get-me-not.....blue.
Oxalis.....yellow, pink, lavender, white.
Poppy, Iceland.....white, orange, yellow.
Primula.....various colors.
Pyrethrum.....various colors.
Viola.....yellow, white and blue.

Tall Growing Shrub Plants—Perennial For Grouping From 2 ½ ft. up

Abutilon
Anchusia.....blue.
Aster.....various colors.
Canna.....various colors.
Canterbury Bells.....various colors.
Chrysanthemum.....various colors.
Columbine.....yellow, violet, rose.
Dahlia.....all colors.
Delphinium.....various colors.
Digitalis
Fuchsia
Geranium.....scarlet, white, pink.
Gladiolus.....various colors.
Goldenrod.....yellow.
Hollyhock.....various colors.
Lantana.....red, white, yellow.
Lavender.....
Lobelia Cardinalis.....scarlet.
Lupin.....shades of blue.
Poppy, Oriental.....various colors.
Phlox, Perennial.....various colors.
Scabiosa.....
Snapdragon, Tall.....various colors.
Wallflower.....various colors.

Climbing Vines--Perennial

Ampelopsis, Boston Ivy and Virginia Creeper....
Clematis.....white, lavender, red.
Cobea Scandens.....
Kudzu Vine.....violet.

For Rockeries, Hanging Baskets or Window Boxes

Asparagus Fern.....
Edelweiss.....
For-get-me-not.....blue.
Ice Plant.....
Lobelia Trailing.....blue.
Mimulus.....yellow.
Nasturtium.....various colors.
Oxalis.....yellow, white, pink, lavender.
Portulaca.....
Thunbergia.....buff, orange and white.
Verbena.....various colors.
Petunia.....various colors.

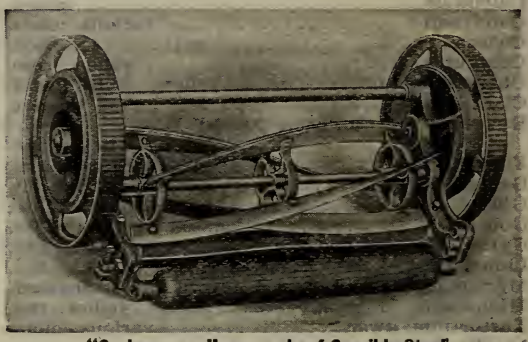
☞PLANTS for immediate effects supplied in season—see Plant Dept.

Garden Tools, Implements, Etc.

Highest Grade **Cycle Lawn Mowers** **Fully Guaranteed**

Stationary, draw-cut blade, self sharpening, protected from rocks, nails, etc., keeps the mower close to the turf on uneven ground — cuts all the grass right the first time over.

CYCLEMOWERS.—Have self-adjusting ball bearings, bed knife rests on frame instead of being supported by screws—as in other models—making it impossible to bend or warp out of alignment, the revolving wiper baldes draw the grass over the keen cutting edge of the bed knife. This is the big distinctive feature of the Cyclemower, and is entirely different from other lawn mowers. The bed knife is protected, has lipped cutting edge, does not wear unevenly, and is self sharpening and adjusting. We tried them out for a season on our own grounds before offering to our customers and found them superior in every respect. **If you would be free from lawn mower troubles, buy the light running, self sharpening Cyclemower.**



"Cyclemowers" are made of Crucible Steel

PRICES AND SIZES

14 in. cut, 8 in. wheel, 4 blades	**$6.00**	16 in. cut, 10 in. wheel, 4 blades	**$8.25**
16 in. cut, 8 in. wheel, 4 blades	**6.25**	18 in. cut, 10 in. wheel, 4 blades	**8.75**
14 in. cut, 9 in. wheel, 4 blades	**6.75**	14 in. cut, 11 in. wheel, 5 blades	**10.25**
16 in. cut, 9 in. wheel, 4 blades	**7.25**	16 in. cut, 11 in. wheel, 5 blades	**11.25**
14 in. cut, 10 in. wheel, 4 blades	**8.00**	18 in. cut, 11 in. wheel, 5 blades	**12.50**

DUNHAM'S

ROLLER BEARING

Lawn Rollers

The only Lawn Roller with Automobile Roller Bearing Axles

They cost no more than others and run 44% easier

PRICES--F. O. B. SPOKANE

		Sec.	Wgt.	
LR404	20x20	2	250	$18.50
LR407	20x24	2	300	21.50
LR410	24x24	2	450	28.50

One and Two Section "Water-Weight" Rollers

These can be filled with water or sand, and when empty are easily transported, adjusting the weight to suit.

	Sec.	Empty	Water	Sand	
WB5...18x24	1	75	300	500	$13.00
WB7...24x24	1	125	500	800	17.50
WB11..18x24	2	100	300	500	19.00
WB13..24x32	2	170	650	1000	25.00
WB15..24x24	2	145	500	800	22.00

"DIAMOND"
Fancy Recleaned
GRASS SEEDS

Special mixtures for very wet land, terraces, shady places, tennis courts, golf links. Write us. We can save you money and help you to secure the best possible results from your plantings. **Page 50.**

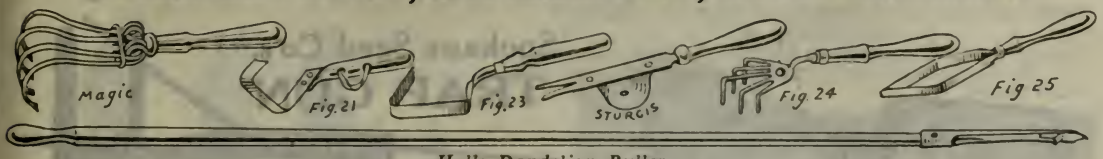
To produce a luxuriant dark green velvety lawn, sow DIAMOND FANCY MIXED LAWN GRASS and fertilize with DIAMOND LAWN AND ROSE FERTILIZER

A 100-lb. bag of Diamond Lawn and Rose Fertilizer is sufficient for the average city lot for one season, is easily applied, costs less than manure. is clean and odorless and is a **complete fertilizer that will** not only stimulate a quick, luxuriant growth, but will remain in the soil until used and not leach away and be lost.

The base of Diamond Fertilizer is bone meal and tankage. No cheap fillers are used; they are all fertilizers. Ask for our Fertilizer Book—its free.

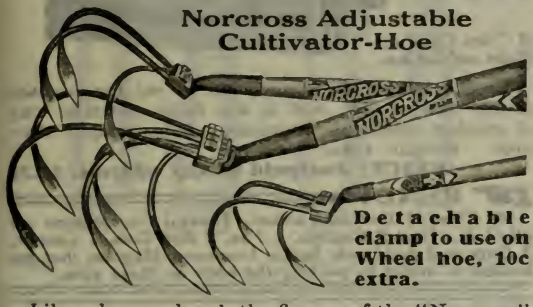
KILMOL—The U. S. Government Formula for Killing Moles and Gophers—Will rid your lawn and garden of these destructive pests—See Page 163.

GARDEN TOOLS, IMPLEMENTS, ETC.—Continued



Halls Dandelion Puller

Norcross Adjustable Cultivator-Hoe



Detachable clamp to use on Wheel hoe, 10c extra.

Like a human hand, the fingers of the "Norcross" work closely around the plants without injury. Keeps down weeds, saves moisture, leaves the ground level.

Prices:

FIVE PRONG for regular garden work; 4-ft. handle, weight 4 lbs., **$1.00**

THREE PRONG lighter in weight, for narrow rows and close work, 4-ft. handle, weight 3 lbs., **75c**

MIDGET, 3 prong, 9-in. handle for flowers or close hand work, weight 1 lb., **each 35c**

Reddick Mole Trap

No Mole Can Pass Under It and Live.

These traps are strong and durable and worth the price to anyone troubled by moles.

Full directions with each trap (See cut.)

Weight 3 lbs.

Price, 75c

REDDICK MOLETRAP

OUT O'SIGHT MOLE TRAP

Out O'Sight Mole Trap

One of the best. Sure to "get them."

Weight, 2 lbs., **Price, 75c**

Gopher Trap

California Box.—Similar to "Out O'Sight," except this trap has sides boxed up; never fails. Weight, 1 lb. **Price, each, 25c**

Whitney Rodent Torch

WHITNEY RODENT TORCH.—Exploded in the runway, the poisonous gases penetrate all parts and suffocate the animal—specially effective against moles—express or freight (cannot be mailed); pkg. of 25, weight, 1 lb. **Price, 60c**

Five of the Best Hand Weeders

Magic Weeders. Made of best quality hard steel wire, an ideal tool for fining the surface soil. We offer four sizes, illustrated above:

Magic No. 0, 3 tines, short handle, wt. 1 lb. . . **15c**
Magic No. 1, 4 tines, short handle, wt. 1 lb. . . **25c**
Magic No. 4, long handle, 4 tines **50c**
Magic No. 5, long handle, 4 tines, heavy wire, wt. 3 lbs. **60c**
Fig. 21. Lang's. Weight, 1 lb. **25c**
Fig. 23. Hazeltine's. Weight, 1 lb. **30c**
Fig. 24. Excelsior. Weight, 1 lb **20c**
Fig. 25. Noyes'. Weight, 1 lb. **25c**

Dandelion Pullers

Sturgis (see cut). A most convenient tool for digging these troublesome weeds. Wt. 1 lb. Each **35c**

Halls (see cut). Pulls the root without tearing up the lawn; long handle; polished steel blade. Weight, 2 lbs. Price. **50c**

No. 212 No. 211 No. 213 No. 217

Garden Trowels

See descriptions of numbers on cuts.

Don't class these tools with the cheap stock offered by the department stores. (See cut.)

No. 211. Six inch; blade and shank of one piece of forged steel. The best tool of its kind in the market. Weight, 1 lb. **50c**

No. 213. Six inch; good steel trowel, with malleable iron shank, firmly riveted. Wt., 1 lb. **15c**

No. 212. Six inch; solid steel; a first-class trowel. Weight, 1 lb. **35c**

No. 217. Six inch; steel transplanting trowel. Weight, 1 lb. **20c**

No. 217. Eight inch; steel transplanting trowel. Weight, 1 lb. **25c**

No. 217A. Transplanting hoe trowel, used by gardeners in setting out plants. Wt., 1 lb. **50c**

No. 216. Ladies' flower trowel. Wt., 1 lb. **10c**

No. 216A. Special Bulb Trowel. Wt., 1 lb. **75c**

Wood-lark

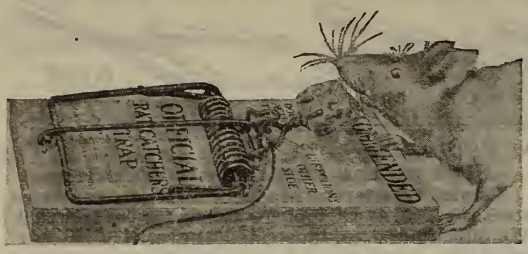
SQUIRREL AND GOPHER POISON

Guaranteed to exterminate Squirrels, Sage Rats, Pocket Gophers, Field Mice, Prairie Dogs, Crows. Should be used early in the season when green food is scarce. **Price, 1 lb. package, 35c**

Cannot be mailed--Poison.

Add postage at zone rate if ordering by mail

GARDEN TOOLS, IMPLEMENTS, ETC.—Continued



The Official Rat Trap

The Government selected this trap from among thousands of models submitted. Spring releases with either upward or downward pressure—**Rats Nibble Upward.** *The "Official" always gets them.*

Official Rat Trap, weight 1 lb., Each 20c

Official Mouse Trap, weight 4 oz., Each, 5c

Spokane Seed Co's. TRAP GUN

A "Sure Cure" for Moles and Gophers.

Breech loader, 16 gauge; can be set for coyotes coons, hawks, etc., and is the most effective way of getting moles and gophers. Safe, simple, durable. Weight, 4 lbs.

PRICE: Postpaid to any address, $1.75

READ!

Mr. Chas. H. Davidson writes:-- Those 3 Coyote guns are all O. K. I got 9 Coyotes, 1 Fox, 2 Bob Cats, 1 Cougar, 3 Dogs and gadd only knows how many Magpies that got blowed to atoms by pecking the baits on these guns.

KNIVES

Will send any of the following knives postpaid at these prices. See numbers on cut.

Budding Knives

Prices Postpaid

No. 8. Ebony handle, stationary ivory bark opener. **Price, $1.00**

No. 8 ½. Same as above, only size larger. **Price, $1.25**

No. 10. Ivory handle, very light and fine. **Price, $1.00**

No. 10 ½. Same as above, only size larger. **Price, $1.25**

No. 12. Brown handle; very light and fine. **Price, 85c**

No. 13. Plain wood handle, stationary blade. **25c**

No. 5. Budding and pruning knife combined. **Price, $1.00**

Pruning Knives

Note.—See numbers in descriptions.

No. 2. Plain wood handle, stationary blade. **Price, 50c**

No. 3. Large horn handle, very strong. **Price, $1.50**

No. 4. Polished wood handle. **Price, 80c**

Grass Hooks or Sickles

These are the latest style and shape.

Village Blacksmith.—No. 3. Hand forged, weight, 1 lb. **Price, 50c**

Village Blacksmith. — No. 33. Heavy. Wt., 1 lb. **65c**

King of Grass.—No. 1065. Wt. 1 lb. **25c**

Grass Shears

Fine for trimming borders and edges; 6-in. blade.

"Razor Edge."—No. 1162. 1 lb. **50c**

Village Blacksmith.—No. V 51. 1 lb. **$1.00**

Grafting Knives

No. 6. Plain wood handle, stationary blade. **Price, 35c**

No. 7. Plain wood handle, stationary blade; smaller. **Price, 25c**

No. 9. Special Henckels Grafting Knife—has extra heavy brass lining, brass rivets, blade set deep in handle, giving great strength. **Price, each, $1**

Grafting Wax

Lion Brand.— ¼ lb., 10c; ½ lb., 20c; lb., 35c

Add postage at zone rate.

Raffia

For tying plants and buds **Lb., 25c**

For colored Raffia, See Page 64.

Pruning Saws

Add 10c Each for Postage.

Crescent, 12-inch blade **65c**

Crescent, 14-inch blade **75c**

Straight blade, 16-inch **60c**

Straight blade, 18-inch **65c**

Straight blade, 20-inch **70c**

Corn Knife

Best style broad tapered blade. Length, including handle, 22 ½ inches. Wt., packed, 2 lbs.

Price, 50c

FLORISTS We carry a large stock of up-to-date Supplies—the very best lines—and your orders or inquiries will have prompt attention. We can save you money and give you prompt service. WRITE OR WIRE.

Garden Tools, Implements, Etc.—Continued

NOTE.—Compare numbers on cut to those in descriptions.

No. 4773. 9-inch; full polish, with double brass springs; best American make. Weight, 1 lb. **Price, $1.50**

No. 40. 9-inch; bright finished, polished blade, spiral steel spring; made for hard service. Weight, 1 lb. **Price, $1.00**

No. 41. Same as No. 40, except with ratchet nut. Weight, 1 lb. **Price, $1.25**

No. 30. 7-inch; German make; black finish; polished blade; very good. Weight, 1 lb. **Price, 75c**

No. 31. Same as No. 30, only 9-inch ratchet nut; an American make. Wt., 1 lb. **Price, $1.00**

No. 59. Thinning Shears. Weight, 1 lb. **Price, 35c**

No. 51. Same as No. 50, except that it is 6 ½ inches long. Weight, 1 lb. **Price, $1.25**

No. 50. Five and a half-inch, nickle-plated; small, but of best material; fine for ladies. Weight, 1 lb. **Price, $1.00**

Flower Shears

Nickle-plated; with springs; cuts and holds the flower from falling until opened again. **Postpaid, $1.25**

Grape Shears

Holds fruit or plant until released. **Postpaid, $1.00**

Rhodes Double Cut Pruner

Cuts both sides clean without bruising. Length 30 inches. Wt., 3 ½ lbs. **Price, $2.50**

New DETROIT Tree Pruner

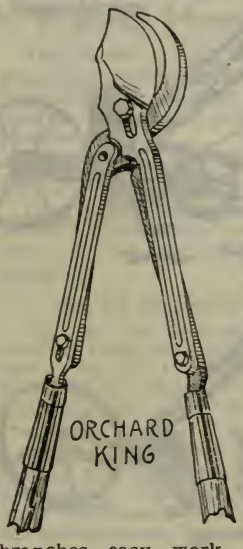
LONG HANDLE

The powerful leverage and improved construction make the "Detroit" a reliable and satisfactory tool. The material is first class throughout and will stand hard service.

PRICES, 6 ft., **$1.65;** 8 ft., **$2.00;** 10 ft., **$2.25**

Cannot be mailed

Detroit



Branch Shears

Fig. 126. This has no equal in its class; is forged from high-grade tool steel; finely tempered, solid wrought steel ferrules. Patent lock nut. Cannot work loose and ruin shears. 26-inch handle. Weight, 4 lbs. **Price, $2.00**

Fig. 35. Standard pattern. Satisfactory for light work; a good value.

26-inch handle, weight 2 ½ lbs., $1.00; 41-inch handle, wt., 3 lbs., $1.25

Orchard King

Improved Branch Shears

The "Orchard King" is made of the finest material, has heavy ferrules and the powerful compound lever makes cutting of heavy branches easy work. Thirty-six-inch hardwood handles. Weight, 5 lbs. **Price, $3.00**

Miscellaneous Florists' and Nurserymen's Supplies

PLANT STAKES.—Round cedar, painted green, white tops.
3 ft., 85c doz.; 3 ½ ft., 90c; 4 ft., $1.00; 5 ft., $1.50; 6 ft., $2.50.

PENCILS.—Indelible, nickle tip, for marking labels. **Each, 15c**

OREGON MOSS.—We have this gathered, dried and put up in bales of about 100 lbs. each for florists' and nurserymen's use. Write for price by ton or carload. **Per lb., 5c; 100 lbs., $3.50**

WIRE DESIGNS.—Every description. List on request.

WIRE HANGING BASKETS.—
8 in., 20c; 10 in., 25c; 12 in., 30c; 14 in., 50c

MASTICA--For Glazing New or Old Greenhouses.—The use of "Mastica" avoids the necessity of repeatedly reglazing the houses, saving much time and expense. With "Mastica" you can bed in, or use outside with machine. Broken glass can be easily removed and replaced by new without breakage of other glass, which usually occurs with hard putty. One gallon will cover about 290 running feet (one side). Weight, 17 lbs. pkd. **Per gallon, $1.60**

MASTICA GLAZING MACHINE.—"Mastica" is forced through the opening at the heel, and is smoothed into perfect condition by the foot passing over it. Weight, 2 lbs. **Price, $1.50**

Wooden Labels

TREE LABELS.—Painted iron wire. **Per 100, 15c; per 1,000, $1.00**

Unpainted iron wire. **Per 100,15c; per 1,000,85c**

Painted copper wire. **Per 100, 20c; per 1,000, $1.20**

Unpainted copper wire. Weight pkd., 4 lbs. per 1,000. **Per 100, 20c; per 1,000, $1.05**

POT LABELS.—4-inch. **Plain, per 100, 15c; 1,000, 70c**
Painted, 1,000, 85c. Wt. pkd., 4 lbs. per 1,000.
5-inch. **Plain, per 100, 20c; 1,000, 85c**
Painted, 1,000, $1.05. Wt. pkd., 6 lbs. per 1,000.
6-inch. **Plain, per 100, 20c; 1,000, $1.25**
Painted, 1,000, $1.45. Wt. pkd., 9 lbs. per 1,000.
8-inch. **Plain, per 100, 30c; 1,000, $1.50**
Painted, 1,000, $1.80. Wt.pkd.,11 lbs.per 1,000.

TIN FOIL--Florist.—Regular stock. **Per lb., 15c**

GLAZING POINTS--Peerless.—Best point made. No raising up when driven—no rights, no lefts, no sliding, no trouble to apply; cheap, indestructible. Once used always used. 1,000 in box. Wt., 2 lbs. **Price, 75c**

PUTTY BULBS.—Very convenient for applying liquid putty in glazing greenhouses. Wt., 1 lb. **Price, $1.00**

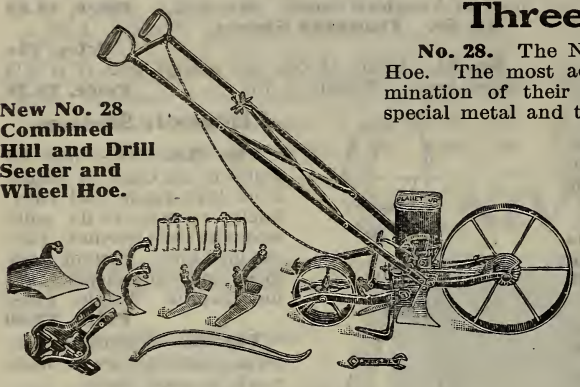
Add postage at zone rate if ordering by mail

Planet Jr. Garden Tools

FOR over 40 years Planet Jr. Garden Tools have stood the test of world-wide usage, and are recognized in every known country as the highest type of garden implement. In Europe, where labor is cheapest, Planet Jrs. are in constant use. How, then, can you afford to be without them where labor is both high and scarce? We cannot tell you all about Planet Jrs. in this catalog, but will send you the beautiful 72-page Planet Jr. book on request.

Being general selling agents for Planet Jr. implements, our stocks are large and orders will hav prompt attention. State your requirements. We will advise the correct tool.

Three New PLANET JRS.



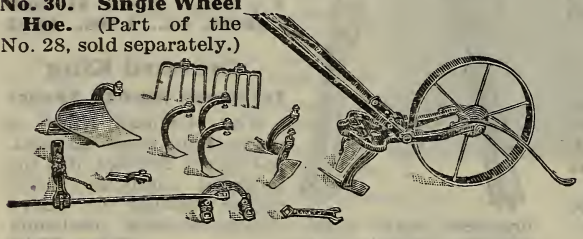
New No. 28 Combined Hill and Drill Seeder and Wheel Hoe.

No. 28. The New Combined Hill and Drill Seeder and Wheel Hoe. The most accurate and perfect of all Planet Jrs.; the culmination of their 40 years' experience. Seeding device is of a special metal and the improved method of delivery gives a narrow straight and even row that can be cultivated easily with the wheel how. The control enables you to make the most perfect and finest adjustment for feeding. See Planet Jr. Catalog.

Packed, wt. 71 lbs. Price.....**$17.00**

No. 29. This is the Hill and Drill Seeder only; the No. 28 without cultivating attachments. Packed, wt. 57 lbs. Price.....**$13.00**

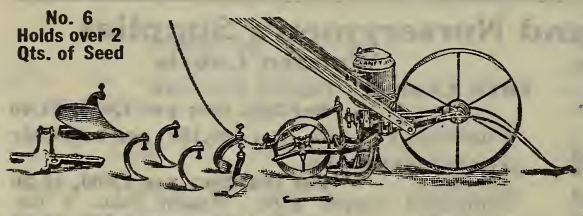
No. 30. The New Single Wheel Hoe. Part of the No. 28 combined seeder and wheel hoe. Complete with attachments as illustrated. Weight packed 42 lbs. Price.....**$9.40**



No. 30. Single Wheel Hoe. (Part of the No. 28, sold separately.)

No. 6 Planet Jr. Combined Hill and Drill Seeder, Wheel Hoe, Cultivator and Plow

What It Will Do.—It drops all garden seeds in hills and sows in drills, with the greatest regularity, in a narrow line, to any exact depth required, covers, rolls down and marks the next row, all at one passage. As a wheel hoe, it hoes, cultivates and plows all garden crops, completing a row at every passage, up to 16 inches in width. **Price, Complete, $15.00. Weight, packed, 64 lbs. As a Seeder Only, $12.50. As a Wheel Hoe Only (No. 36), $7.25.**

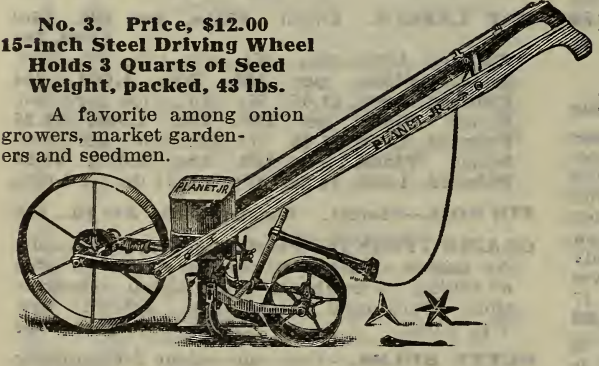


No. 6 Holds over 2 Qts. of Seed

No. 4 Planet Jr. Combined Hill and Drill Seeder, Wheel Hoe, Cultivator and Plow

This tool combines in a single convenient implement a capital hill-dropping seeder, a continuous row-seeder, single wheel hoe cultivator and garden plow. **No. 4, Price, Complete, $12.50. Weight, 53 lbs. As a Seeder Only, $10.50. Holds 2 ½ Quarts of Seed.**

A set of three rakes supplied when specially ordered. **Price, extra, $1.50**



No. 3. Price, $12.00
15-inch Steel Driving Wheel
Holds 3 Quarts of Seed
Weight, packed, 43 lbs.

A favorite among onion growers, market gardeners and seedmen.

No. 3 Planet Jr. Hill and Drill Seeder.

The special force feed is admirable, working equally well whether sowing with an ounce or a full hopper.

No. 25 Planet Jr. Combined Hill and Drill Seeder and Double Wheel Hoe, Cultivator and Plow.

For Market Gardeners, larger capacity than No. 4. Steel Frame. **Holds 2 ½ Quarts of Seed.**

Price, $15.00. Weight, packed, 59 lbs.

No. 5 Planet Jr. Hill and Drill Seeder

16 ½-inch steel wheel. Sheet steel hopper holding 5 quarts. Built on the same lines as No. 3 Drill, only larger.

Price, $14.00. Weight, packed, 52 lbs.

No. 2 Planet Jr. Drill Seeder

It is similar to **No. 1 Planet Jr.,** Combined Drill, but larger, holding twice as much seed, and having higher wheels and larger roller. Has **no cultivating attachment.**

Price, $8.50. Holds 3 Quarts. Weight, packed, 41 lbs.

Planet Jr. Garden Tools

No. 1 Planet Jr. Combined Drill Seeder, Wheel Hoe, Cultivator and Plow

The sowing cylinder is a drum of spring brass set between the driving wheels, with a sliding brass band and cam. In drum and band are corresponding diamond shaped discharge openings, quickly adjusted for any kind of seed. Inside the drum, shields cover the openings, and insure regular sowing with a full hopper or a thimbleful.

A pair of 5 tooth rakes supplied when specially ordered. **Price, extra, $1.50**

Price, with Tools as shown, $11.00. Holds 3 Pints of Seed. Weight, packed, 44 lbs.

Planet Jr. Single Wheel Hoes

The handles are adjustable in height. The frame is **steel**, convenient and strong, with quick change device by which to exchange the tools without removing the nuts.

Nos. 16, 17, 17½ and 18 wheels, frames and handles are alike, but the attachments sold with each vary.

The hoes are the most valuable of all the wheel hoe attachments; are oil tempered and polished. Use the 4-inch for 6, 10 or 12-inch rows; the 6-inch for rows 12 inches and upwards.

No. 16. Planet Jr. Single Wheel Hoe

Price, $6.75. Steel Frame Weight, 26 lbs.

No. 16 Planet Jr. Single Wheel Hoe, Cultivator, Rake and Plow

The No. 16 has 15-inch steel wheel, steel frame, one pair of 6-inch hoes, three cultivator teeth, one large garden plow, a 4 and a 7-inch rake, one leaf guard. The plow hoes and cultivator teeth are oil tempered. This complete equipment is suitable for every requirement and the Planet Jr. Wheel Hoes for 1916 rank as the highest type of their class. **Price, $6.75. Weight, 26 lbs.**

The Plows are invaluable; use them with points together for opening furrows for manure, seed, etc.; then exchange sides for covering; use them also for plowing away from or toward the crop, both sides at once.

The cultivating teeth for deep or shallow work, and for marking out.

Leaf lifters save time and enable fine work to be done close to the row without additional labor, when plants are large or leaves are flat on the ground.

No. 17 Planet Jr. Single Wheel Hoe

You can do more and better hoeing with it in one day than you can do in three days with a hand hoe. The No. 17 has a pair of 6-inch hoes, a plow and a set of cultivator teeth, an outfit sufficient for most garden work. **Price, $6.00. Wt., 23 lbs.**

No. 17½ Planet Jr. Single Wheel Hoe

This tool is identical with No. 16, except in equipment. The pair of 6-inch hoes, three cultivator teeth and leaf lifter which go with it, are all the finest of their kind. **Price, $5.50. Wt., 21 lbs.**

No. 18 Single Wheel Hoe

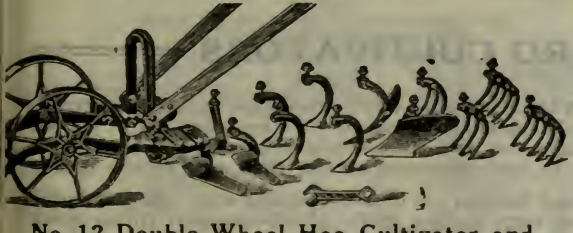
This tool has one pair of 6-inch hoes only—the tools that are constantly useful throughout the season. Other tools can be added as needed. **Price, $4.50. Weight, 20 lbs.**

No. 38 Planet Jr. Single Wheel Disc Hoe, Cultivator and Plow

This combination occupies the same position among Single Wheel Hoes as that taken by No. 14 Planet Jr. Double Wheel Disc Hoe among Doubles. **Price, complete, $8.10. Weight, packed, 28 lbs.**

Planet Jr. Double Wheel Hoes

No. 11 Planet Jr. Double Wheel Hoe, Cultivator, Plow and Rake



The No. 11 is considered the best combined Double and Single Wheel Hoe made, having the largest assortment of useful tools and the frame being adjustable for any depth work. The attachments and their position can be changed in a few seconds. All edge tools are oil tempered—see attachments illustrated—can be used in narrow rows as a single wheel hoe—as a double wheel hoe the arch will straddle plants 20 inches high.

Weight, packed, 39 lbs. Price, with Attachments as in cut, $10.25.

No. 12 Double Wheel Hoe, Cultivator and Plow

This tool is identical with No. 11 Wheel Hoe, except that it has one pair plows, one pair hoes and two pair cultivator teeth only, and is sold at a correspondingly less price. **Price, $9.10. Wt., 34 lbs.**

No. 13 Double Wheel Hoe

This tool is the No. 11, with 6-inch hoes, only, these being the tools that are most generally used. Any or all of the other tools shown with No. 11 may be added at any time.

Price, $5.75. Weight, 29 lbs.

Planet Jr. Garden Tools

DOUBLE WHEEL HOES—Continued

No. 14 Planet Jr. Double Wheel Disc Hoe, Cultivator and Plow

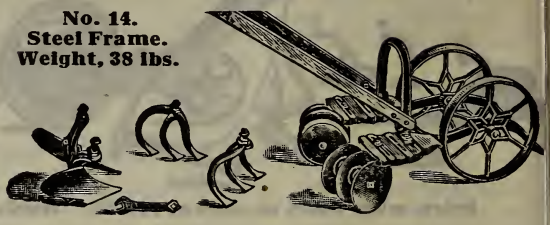
This new tool will give excellent satisfaction; is especially pleasing to all who work peat lands. There are three oil tempered adjustable discs on each side. The frame is **steel.**

The set of prong cultivator teeth are constructed on entirely new lines, and will be found invaluable in general cultivation.

The plows are the regular Planet, Jr., mold and are continually valuable for furrowing, covering and plowing.

Price, with Attachments, as in cut, $9.25.

No. 14.
Steel Frame.
Weight, 38 lbs.



The Three Prong Cultivators are adjusted to run deeper with the outside tooth protecting the plant roots and giving thorough tillage.

Attachments for Wheel Hoes

PEAT LAND HOES.—Weight 5 ½ lbs. per pair. **Per pair, $1.80**

DISC HOES.—Weight 5 ½ lbs. per pair. **Per pair, $2.80**

6-INCH HOES.—Complete. Weight 2 ¼ lbs. per pair. **Per pair, $1.10**

4 ½-INCH HOES.—Complete. Weight 2 lbs. per pair. **Per pair, $1.00**

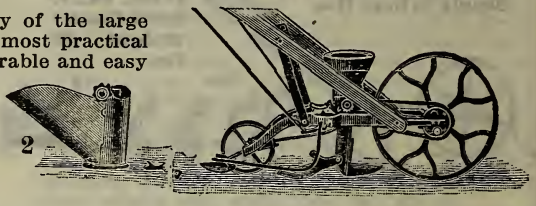
3 PRONG CULTIVATOR TEETH.—Weight 2 ½ lbs. per pair. **Per pair, $1.60**

8-INCH ONION HARVESTER.—Weight 1 ¼ lbs. **$1.25**

RAKES.—3-tooth, each **45c;** 5-tooth, each **60c;** 7-tooth, each, **70c.**

IRON KING SEED DRILL—For Onion Growers

The Iron King Seed Drill is considered by many of the large onion growers of Oregon and Washington to be the most practical of drills for sowing onion seed. It is a well made, durable and easy running machine, accurate and reliable, and with careful use will last a lifetime. It will save the price of the machine in sowing a few acres. If you are growing onions you cannot afford to be without one. The **Iron King can also be set to sow anything from turnips to peas. Price, $10.00. Weight Packed 58 lbs.**



PLANET JR. HORSE HOES AND CULTIVATORS

No. 101
Planet Jr. Plain Cultivator
With Wheel,
packed weight, 55 lbs.
Less Wheel,
Weight, 47 lbs.

Equipment: Five 3x8-inch cultivator steels. Lever expander.

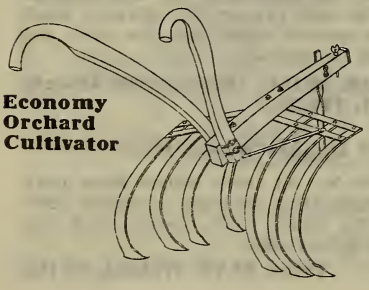
The New No. 101 Cultivator

This machine is the "latest word" in design. **The lever,** instead of standing perpendicular, slants backward between the handles, free from danger of being bent or broken, and prevents injury to crops under cultivation. While the design is one of simplicity, it is very strong and most accurate in its work, and the tool has so few parts that there is no danger of its ever getting out of order.

Price, with wheel, $7.00; without wheel, $6.25.

ECONOMY ORCHARD CULTIVATORS

Economy Orchard Cultivator



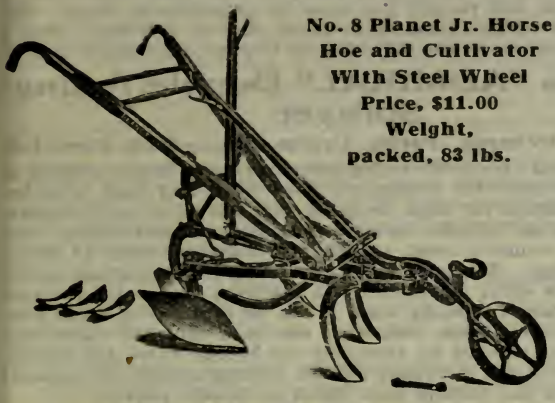
A number of these splendid Cultivators were in the **Fruit Growers' Supply Co.'s** stock purchased by us some time ago. We are going to close them out, and they were purchased on such terms we can offer them to our customers at less than cost to the dealer.

The beams and handles are of oak, frame is steel, and the spring teeth are of the very highest grade of oil-tempered spring steel. The teeth can be set in three different positions: V shape, angle in line, or square across. The teeth can also be placed on either side of the beam for work in the orchard.

PRICE: $4.75 each. At this figure they will not last long.

Order Now

Planet Jr. Garden Tools



No. 8 Planet Jr. Horse Hoe and Cultivator With Steel Wheel Price, $11.00 Weight, packed, 83 lbs.

Planet Jr. Horse-Hoes

No other cultivating machine is so widely known as the Planet Jr. Combined Horse Hoe and Cultivator, for it is in use throughout the civilized world. It is so strongly built as to withstand incredible strain, yet it is light and easy to handle. It opens and closes furrows, hoes right up to the plants without danger of injuring, throws dirt to or from the row and throws back from center again.

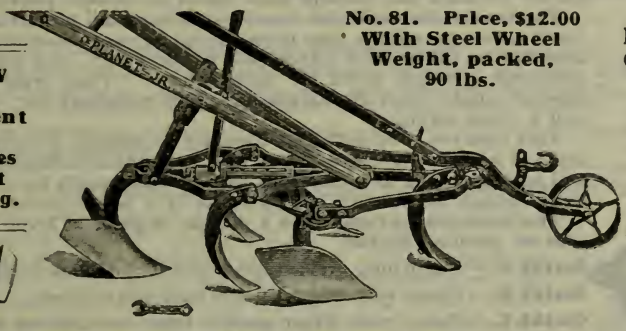
No. 9 Planet Jr. Horse Hoe and Cultivator With Steel Wheel

Price, $9.25. Weight, packed, 70 lbs.

This admirable tool has a plain wheel instead of lever wheel. It has the high frame, patented hollow steel standard, patent lever Star wheel, patent lever expander, and hollow steel wheel arms.

No. 81. Price, $12.00 With Steel Wheel Weight, packed, 90 lbs.

THE NEW PLOW Attachment Fits all Horse-Hoes See Planet Jr. Catalog.

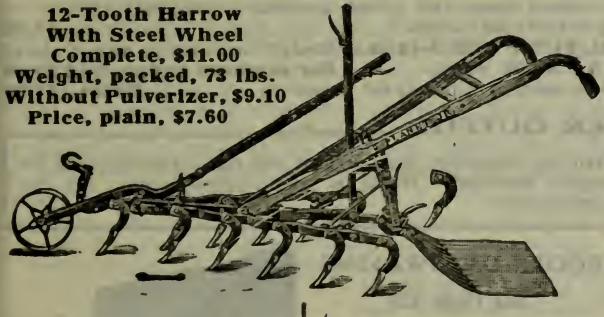


No. 81 Planet Jr. Horse Hoe, Cultivator and Hiller Combined

This is the latest and best tool of the kind. Has six 3-inch cultivator teeth, two 6-inch side plows, and a 12-inch furrowing tooth, making an admirable equipment for all widths of cultivation and for hilling crops up to four feet apart.

It has a cultivator tooth central in front, which increases the steadiness of the tool.

12-Tooth Harrow With Steel Wheel Complete, $11.00 Weight, packed, 73 lbs. Without Pulverizer, $9.10 Price, plain, $7.60



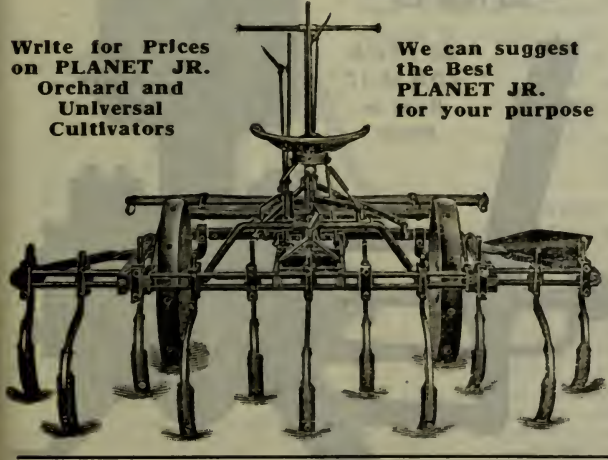
Planet Jr. Twelve-Tooth Harrow, Cultivator and Pulverizer

With the Twelve-Tooth Harrow you go as deep or shallow as you like, come up close to row without injuring plants, cut out all the weeds, stir the soil and mellow and fine it as with a garden rake. You widen and narrow as you please between 12 and 32 inches. It's a special favorite with strawberry growers, market gardeners and truckers.

A strawberry runner cutter consisting of a 10-inch flat steel disc mounted on an outrigger. **Price, extra, $2.30**

Write for Prices on PLANET JR. Orchard and Universal Cultivators

We can suggest the Best PLANET JR. for your purpose



No. 41 Planet Jr. Orchard and Universal Cultivator

The steel wheels are low and entirely enclosed by the frame. **The tongue is steel.**

The frame is high carbon steel, compact in form, well braced, heavy and strong.

Without the extension, it cuts 4 feet in width, having seven stiff steel standards, carrying 2 ¼x10-inch teeth.

With the extension, it cuts 6 feet 6 inches, carrying eleven teeth, and the frame can be changed to cut any width from 6 ½ down to 4 feet.

Disc Harrow Attachment. We sell as an attachment to No. 41 a set of five pairs of discs, making a capital disc harrow.

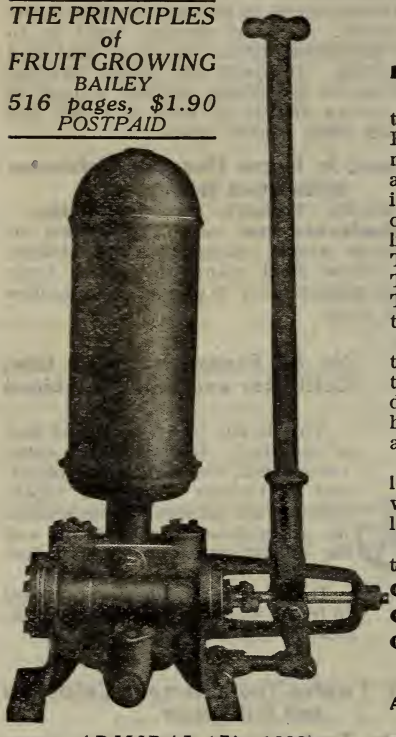
The NEW "PLANET JR." Catalog is the handsomest, best, and most instructive book ever issued on a similar subject. Full of little points that bring profit. Full of true and handsome illustrations. We mail it free to any address on application.

GOULD'S SPRAY PUMPS

We are General Agents for the Gould Sprayers, guaranteed to be the best built, most lasting and of the highest efficiency. They are the recognized standard.

Every grower of fruit, berries, or flowers should have a good spray pump of some kind, one suited to the work that is to be done. If you want to get the best results, you must spray and spray often. Remember, a person derives the same satisfaction from using a good spray pump that he does from using a good article of any other kind; so when you buy, get one of the following up-to-date and reliable outfits.

THE PRINCIPLES of FRUIT GROWING
BAILEY
516 pages, $1.90
POSTPAID



ADMIRAL (*Fig.* 1608).

Gould's "ADMIRAL" Double Acting Sprayer

For Large Orchards, Parks, Groves, Etc.,--Very Powerful.

The "Admiral" is double acting and produces a steady stream at the nozzle, is built for continuous hard work and high pressure. Especially designed for large orchards, and will meet every requirement. The brass cylinder lining is of heavy seamless tubing, with a cast bronze cylinder head, and can be easily removed, as shown in the engraving. This is an important feature, as the gritty nature of many of the spray mixtures has a tendency to cut the cylinder lining, and when it is badly worn it can be replaced at small cost. The valves are all brass, and each one in a separate valve box. They are easily reached by removing the bronze valve box covers. The brass piston rod is outside guided, making a perfectly straight thrust through the stuffing box, which is outside packed.

The removable malleable iron lever is long and powerful, and with the large air chamber a high pressure can be easily maintained. Suction can be taken from either side of the pump, and there are two discharge openings fitted for ½-inch hose. When ordered without hose or nozzle, both discharges have half couplings for ½-inch hose and a brass strainer.

This Sprayer is of sufficient capacity to supply, if necessary, four leads of hose, or two leads, each with two, three or four nozzles, and will be found fully as serviceable as a power sprayer for orchards not large enough to warrant the purchase of a power outfit.

This same pump fitted with a pitman in place of lever for connection to gasoline engine.

Outfit A.—Pump only, with strainer and suction hose coupling **$32.00**

Outfit B.—Pump with 8 feet suction hose and strainer..... **34.75**

Outfit C.—Pump with 8 feet suction hose, two 25-foot leads best ½-inch hose, two 8-foot bamboo extensions, with Globe valves and nozzles..... **42.00**

ADMIRAL PUMP with 3-inch cylinder furnished on any of above outfits for **$3.00** extra. **For pressure gauge, add $2.00**

PITMAN to connect Admiral for power.....**Extra, $1.25**

POWER OUTFITS

We assemble outfits in any manner desired by customer, and suggest the right attachments for special purposes. Attaching any standard engine specified. Write us your requirements. We can save you money and guarantee a satisfactoy equipment.

SCALECIDE

Spreads and Penetrates

Safe, Efficient, Economical

Will not Injure Your Face or Equipment

Apples from trees sprayed with "SCALECIDE" took all the first prizes at the Pennsylvania Horticultural Society Meeting; all the first prizes both this year and last at the New Jersey Horticultural Society Meeting; a long list of sweepstakes and first prizes at the New England Fruit Show in Boston; also first prize at the Ohio State Fair, Connecticut State Fair at Hartford, and Pomological Society Meeting at Berlin, Conn., and a Gold Medal was awarded Scalecide at the National Horticultural Congress, Council Bluffs, Iowa.

FREE SAMPLE and Interesting Information on Request

BOOKS ON SPRAYING

See Page 63

GOULD'S "ADMIRAL" Hand or Power

Corona Dry Powdered Arsenate of Lead is Best—See Sprays

SPRAY PUMPS AND SPRAYERS — Continued

Monarch Two-Cylinder Spray Pump

Fig. 1506.—Monarch.—This pump has many advantages, and we believe it is the best of the large pumps. The main advantages are: First, the long lever, which can be shifted to pull or push, or to lift or drop, and can be changed by the operator any time he desires a relief; second, pump stands outside of the barrel, and all parts can be easily looked after; third, cylinders are perpendicular, and any grit will not lie against the plunger, to wear it or the packing out, as in the case with the horizontal cylinders; fourth, there are no valves in the plungers; the packing is on the outside, and can be tightened any time, without taking anything to pieces; fifth, the four brass valves (each one by itself and under a separate cap), can be reached by merely unscrewing the cap, and without disturbing the rest of the pump.

Outfit A, pump only, including strainer and hose connection, $25.00
Outfit B, coupled with 6 feet ¾-inch suction hose..... 27.00
Outfit C, pump, suction hose, 25 feet best ½-inch spray hose, 8-foot bamboo extension, Globe valve and nozzle..... 35.00
For pressure gauge, add $2.00.

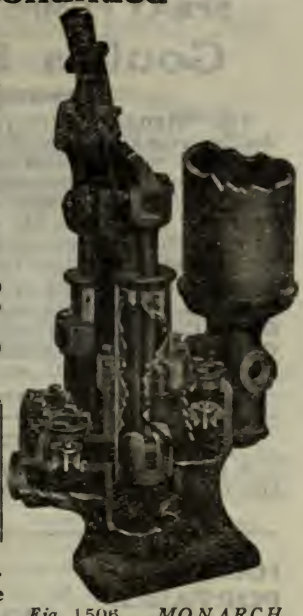


Fig. 1506. *MONARCH*

Take Care of Your Sprayer

Always empty remaining solution, and pump through some clean water after using. Clean thoroughly before putting away at end of season.

Never leave sprayers containing liquid where they will freeze; if the cylinders are iron they are apt to crack and if brass they will expand.

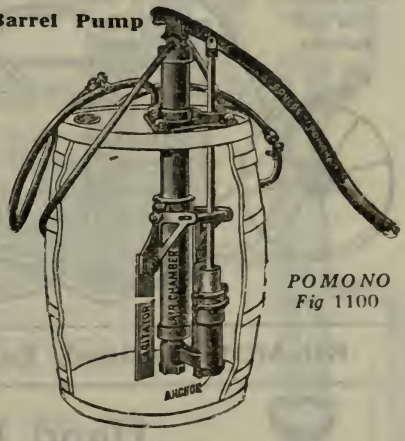
Spreads and Penetrates

An inexperienced or careless man can do a thorough job with **Scalecide** where he would fail to get a good distribution with Lime and Sulphur. **Page 101.**

We recommend the use of a pressure gauge on all large pumps, as it accurately tells the force of spray when delivered.

Gould's Pomona — Our Leading Barrel Pump

Fig. 1100.—"Pomona" Spray Pump has won for itself an enviable reputation. We unhesitatingly offer it as the best orchard spray pump for mounting in a barrel. It has great power and capacity. Briefly stated, other points of superiority are: No. leather packings, consequently no hardened and useless valves. All working parts bronze, including plunger, gland, valves, valve seats, etc. Plunger is outside packed. Valves are easily accessible. Air chamber is very large and of steel, free from imperfections of cast iron. Lever long and powerful, with adjustable stroke, three, four or five inches. The agitator, as shown in the cut, is operated by the stroke of the handle, so whenever any liquid is pumped it is thoroughly agitated. Pump is held securely by small anchor located at bottom of barrel, and by adjustable clamp plate at the top. New plate admits insertion or withdrawal from barrel without removing the agitator.



POMONO
Fig 1100

Outfit A.—Pump only..... $15.00

Outfit B.—Pump with 12 ½ feet ½-inch best 5-ply spray hose, one Vermorel nozzle, one 8-foot bamboo extension, with cut-off, all complete..... **19.75**

FRUITALL
Fig 1188

Outfit C.—Same as Outfit B, except we furnish a good hard wood barrel and mount the outfit..... **21.75**

Outfit D.—This is our regular Pomona outfit, the best barrel pump outfit that can be bought. It consists of one No. 1100 pump with two 12 ½-foot leads of best 5-ply spray hose, two Vermorel or Seneca nozzles, two 8-feet bamboo extensions, with cut-off; all in working order and mounted in barrel..... **25.00**

Fruitall

Fig. 1188.—"Fruitall" Spray Pump is made on the same general lines as our famous "Pomona." It is, however, made lighter and of smaller capacity. All working parts, including plunger, gland, valves, valve seats and strainer are made of brass. Pump is held in barrel by anchor at bottom and adjustable clamp at top, fitting over end of stave. Not made for side of barrel.

Outfit A.—Pump only..... **$11.50**

Outfit B.—Pump with 15 feet of 4-ply spray hose and one Vermorel nozzle, all complete..... **14.50**

Outfit C.—Pump mounted in barrel. 15 feet 4-ply hose, 8-ft. bamboo nozzle and cut-off, all complete.. **18.50**

NOTE.—Extra 5-ply hose at 13 ½ cents per foot.

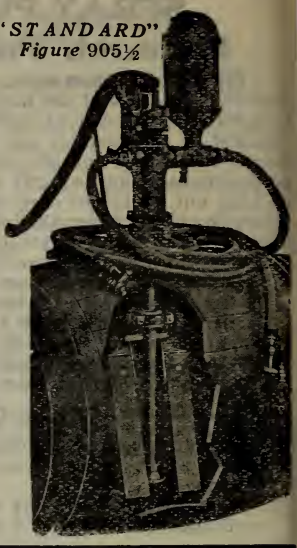
Planet Jr. Special Orchard Cultivators Are Strong, Light, Easy Running, Durable, Adapted to Every Need—Pages 92-93.

SPRAY PUMPS AND SPRAYERS—Continued

Gould's Standard Sprayer

Powerful, Large Capacity, Durable.

"STANDARD"
Figure 905½



The **"Standard"** Sprayer is made with a 2 ½-inch cylinder. The cylinder is brass-lined, the plunger brass-encased and the valves are brass, making all working parts proof against the spraying mixtures. The plunger is easily repacked without taking the sprayer to pieces, and is unusually large, known as a "differential" plunger, which produces a continuous stream of liquid from the nozzle, similar to the action of a double-action pump. The large standard provides an ample air chamber. The base is made so as to fit either the end or side of a barrel.

Outfit A.—Pump and strainer only.....**$ 8.00**
Outfit B.—Pump with agitator and suction pipe..... **9.50**
Outfit C.—Same as B, with 1 15-foot lead of hose and nozzle..... **12.50**
Outfit D.—Same as C, with 2 15-foot leads of hose and nozzles..... **16.00**
Outfit E.—Same as D, with 2 bamboo extensions and globe valves. **19.00**

We supply a barrel and mount sprayer for **$2.50** extra.

Field Crop or Potato Sprayer

A practical 4 row adjustable attachment including nozzles, for use with any barrel or power pump. A first-class outfit built for service.

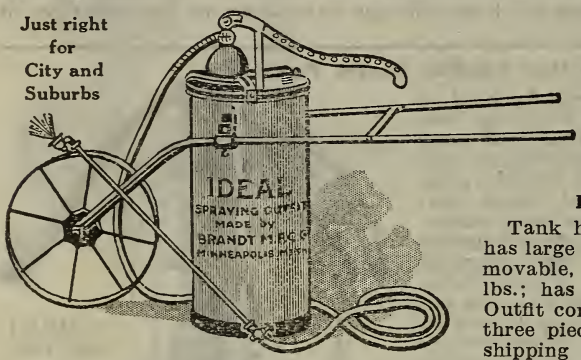
Price, Complete, $15.00

HANDY PORTABLE SPRAYER

Handy Portable Sprayer

With Cog Gear Spray Pump and Mechanical Agitator

Just right for City and Suburbs



"Ideal" Spraying Outfit

The **"Ideal"** has been designed for small growers, city and suburban homes, and for all purposes where nothing as large as a barrel or power outfit is needed, and is the right outfit for the poultryman who does much regular spraying or whitewashing.

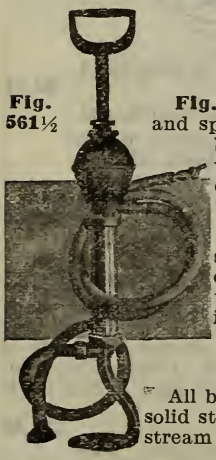
Is Light, Compact, Easy to Operate.

Tank holds 15 gallons; will not slop or spill. Pump has large air chamber. Bronze ball valves; valves are removable, cannot clog. Well made; gives a pressure of 150 lbs.; has mechanical agitator and strainer for suction. Outfit complete, 10 ft., 3-8 inch hose, 10-ft. extension in three pieces, one T-handle shut-off, one **"Ideal"** nozzle; shipping weight, crated, 60 pounds. Price.....**$20.00**

KIL-MOL—Positively Exterminates Moles and Gophers. Page 163.

Hand Pumps and Sprayers

Fig. 561½

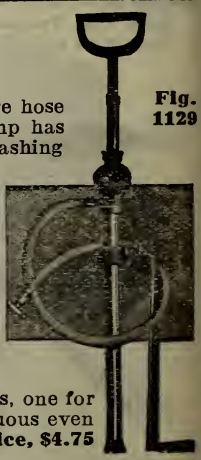


Premier Bucket Pump

Fig. 561 ½.—Brass bucket pump, arranged with suction and discharge hose and spray nozzle, which will throw a solid stream or fine spray. Pump has brass cylinder, plunger and rod, and is particularly adapted for washing windows and wagons, spraying flowers in conservatories, gardens, etc., etc.

Price, complete, $6.00

Fig. 1129



Bordeaux Bucket Pump

Fig. 1129.—Brass garden and spray pump; is especially designed for spraying in gardens and greenhouses. The pump is double action in effect; Seneca nozzle, ball valves; proof against the action of acids and oils. Footpiece is malleable iron. Pump is set in pail or bucket, with foot outside. Weight 6 ½ lbs.

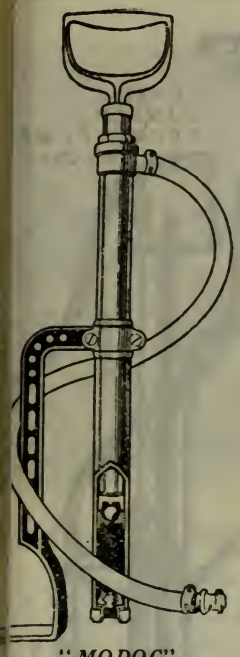
Price, complete, $4.75

Diamond Spray and Force Pump No. 32

All brass except handle and stirrup. Ball valve, air chamber, 3 nozzles, one for solid stream for fire fighting. 3 feet of good hose. Will throw a continuous even stream or spray, a very powerful bucket pump. Wt., packed. 6 ½ lbs. **Price, $4.75**

Fruit and Ornamental Trees, Berry Bushes and Plants, Roses and Flowering Bulbs—New and improved varieties for Northwestern growers fully described in our 64-page illustrated Autumn Catalog. Mailed Free on Request.

SPRAY PUMPS AND SPRAYERS—Continued



"MODOC"

MODOC

The Modoc is a splendid value in a Bucket pump being strongly built of the best material. Has large air chamber making possible a very heavy pressure.

Price, each, $3.00

"HOW to Spray, WHEN to Spray, and WHAT SPRAYERS to Use."

Tells all about sprays and sprayers, and how to make the best "white wash."

Ask for a Copy.

Brandt "PERFECTION"

A first-class pressure sprayer with automatic cut-off and nozzles for fine and coarse work. Capacity 4 gals., shipping wt., 14 lbs. Price:

Galv. Steel Tank, $5.75
Brass Tank, $7.75

Acme Compressed Air Sprayer

Made of strong galvanized steel with locked seams tested to 60 lbs. air pressure. Brass pump-seat, bronze ball check-valve easily removable, seamless brass cylinder 1½ diameter, solid brass non-corrosive, self-cleaning nozzle with spiral point, producing whirling spray, an exclusive patented feature producing a finer and better spray than any other pressure sprayer.

Capacity 3 gals., adjustable carrying strap. 3 foot extension.

Price, each, $5.75

Diamond Poultry Dip

Keeps your poultry healthy and yards in a sanitary condition. See index.

AUTO-SPRAY No. 1

Spokane Seed Co.'s Bucket Pump

This little pump is very convenient for all sorts of small work. Has brass cylinder and valves, two nozzles, for fine or coarse work. The best low-priced pump on the market.

Weight, 6 lbs., Price, $2.75

Brown Auto-Spray No. 1

The **"Auto-Spray" No. 1** works automatically for six to fifteen minutes. Two pumpings will usually discharge the entire contents. Simply fill two-thirds full of solution and pump up air pressure.

No other style of sprayer will do such a variety of work and do it so well. We recommend it for shrubs and vines, greenhouses, poultry houses, hospitals and stables for disinfectants, for sheep and cattle dip and fly oils.

Diameter, 7 inches. Height, 2 feet. Capacity, 4 gallons. Weight, empty, 8 lbs. Weight, loaded, 39 lbs. Weight, shipping, 13 lbs. **Price, Galvanized, with stop cock, $5.25; brass, $7.75**

With the Auto-Pop Nozzle, see cut A, $1.00 extra.

P. S. CO.'S BUCKET PUMP

Spokane Seed Company's Handy Carts

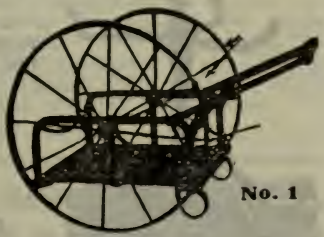
No. 4

All Metal Parts Malleable Steel, Strong, Light, and Easy Running.

No. 4 Barrel Cart

Will pick up any kind or size of barrel from a lime to large spray barrel, holding it firmly; no attachment necessary on the barrel. Contents can be emptied by simply raising the handles. Has 36-inch wheels, 2½-inch elliptical rims, ⅞-inch steel axle; weighs, K. D., 70 pounds.

Price, $9.00



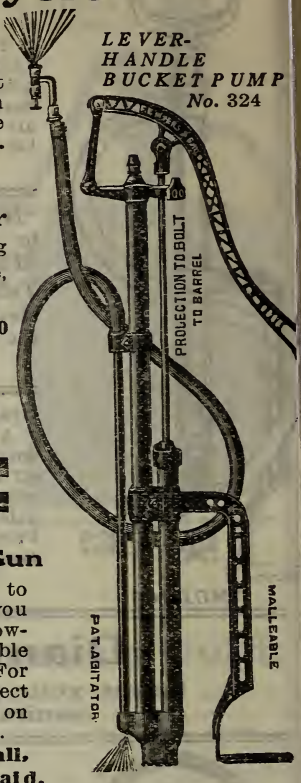
No. 1

No. 1 PLATFORM.—Best cart for general use. Will carry four large milk cans, sacks of potatoes, wood, barrels, in fact, anything heavy can be easily and quickly handled. Platform 27x30 inches; 36-inch wheel, 2½ inch elliptical tire. Neatly finished and painted. Weight, K. D., 85 pounds. **Price, $10.00**

Spray Pumps and Sprayers

Lever Handle Bucket Pump No. 324

The lever handle and large air chamber make this the most powerful bucket pump and the easiest one to operate. All working parts are solid brass with brass ball valves and patent agitator. Fitted with graduating Vermorel nozzle to throw a fine or coarse spray or a solid stream. Weight, 8 lbs. **Price, $4.00.**



LEVER-HANDLE BUCKET PUMP No. 324

Hand Sprayers and Sprinklers

Aspinwall Sprayer

Fig. 30. One of the most convenient and economical hand sprayers for applying liquid lice-killers, sprays, etc. Nothing cheap but the price. Weight, 1 ½ lbs. **Price, 50c**

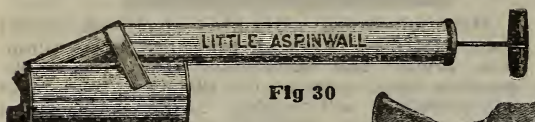


Fig 30

Aspinwall Powder Sprayer

Fig. 20. Excellent for blowing powder on vines and bushes; good size, and works fine. Weight, 2 lbs.

Price, $1.00

"Corona Dry"

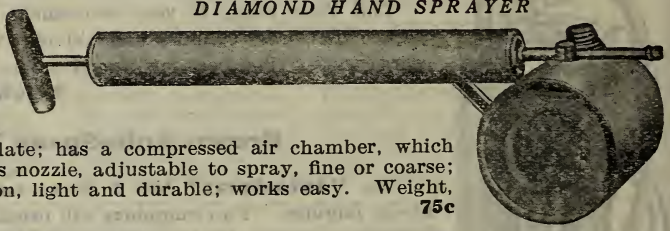
The universal insecticide. Ask for a copy of "Garden Pests and Their Control." Mailed free. See page 103.

Insect Powder Gun

There is no need to waste any powder if you use this small hand powder blower. Detachable bottom for filling. For use in applying insect powder of any kind on poultry, dogs or cats.

Price, each, small, 15c; large, 30c, postpaid.

DIAMOND HAND SPRAYER



Spokane Seed Co.'s Diamond Hand Sprayer

This is the best hand sprayer to date; has a compressed air chamber, which makes the pressure continuous; has brass nozzle, adjustable to spray, fine or coarse; brass ball valve; is simple in construction, light and durable; works easy. Weight, 1 ½ lbs. **75c**

Plant Sprinklers

These little sprinklers are used by all florists for spraying pot plants with water or insecticide. They are made of the best quality of rubber, and are durable and lasting. Made in two styles. Straight and angle neck. Will spray in any position, and can be quickly filled. (See cut.)

No. 1. 5-oz., Straight neck, weight 4 oz. ..... **Each, $0.60**
No. 3. 10-oz., Straight neck, weight 8 oz. ..... **Each, 1.00**
No. 1. 5-oz., Angle neck, weight 4 oz. ..... **Each, 0.65**
No. 3. 10-oz., Angle neck, weight 8 oz. ..... **Each, 1.10**

PLANT SPRINKLER

Pacific Lawn Sprinklers

Properly constructed, iron stand, upper part all brass. Turns with small force. Weight, 3 ½ lbs. **Each, $1.25**

PACIFIC

BUSY

A regular water flirter, runs easy. Weight, 2 lbs. **Price, $1.00**

BUSY

C. B. G. See Cut page 99.

Cheap, but good. Best cheap sprinkler. Weight, 2 lbs.

Price, 35c

Kinney Siphon Pump

No florist or gardener can afford to be without this practical device. It is invaluable for applying liquid manure spraying, tempering water or drawing water out of furnace pits; made of solid brass; will last a lifetime. Weight, 1 ¼ lbs.

Price, each, $2.50

NICOTICIDE-- is the most efficient remedy for Aphis, Thrip, Mealy Bug, Red Spider, etc. Used as a spray or for fumigating; is equally satisfactory. **Florists** everywhere depend on **Nicoticide.** For prices see Sprays.

NICOTICIDE LAMPS—For fumigating. **Each, 50c**

Nozzles, Connections and Hose Supplies

Fig. 1501, Mistry Jr. Best hop nozzle; throws a perfect spray; of greater capacity and a great improvement over other nozzles; produces a fog in great volume at a light pressure. Weight 8 oz. **Price, $1.25; extra disc, Fig. 6, 25c**

Fig. 1431, Mistry Nozzle. The latest thing in spray nozzles. It produces a perfect mist or fog with small pressure. Weight 4 ozs. **Price, $1.00; extra cap, Fig. 4, 15c**

Fig. 1432. Large Mistry. Same as above, but is larger, and has a swivel adjustment, which allows the spray to be thrown at any desired angle. Weight 1 lb. **Price, $2.00; extra cap, Fig. 2, 30c**

Fig. 16. Vermorel Nozzle. With degorger, affords a conical discharge. Very popular. Weight 4 ozs. **Price, 75c; extra cap, Fig. 3, 20c**

Two-Discharge Vermorel. Covers twice the surface sprayed by the single nozzle. It is the nozzle for general orchard work. Wt. 1 lb. **Price, $1.75**

Fig. 81. Seneca. Gives a very wide spray; discharge easily graduated. Weight 5 oz. **Price, 75c**

Fig. 1. Bean's Best. Best long-distance nozzle. Wt. 2 ozs. **Price, 75c; extra cap, Fig. 5, 20c**

Fig. 17. Bordeaux. Weight 6 oz. Use this nozzle for whitewashing. **Price, 75c**

Fig. 51. Cyclone Nozzle. With side discharge. Weight 2 ozs. **Price, 75c**

Fig. 20. Nozzle Ell. Weight 2 ozs. **Price, 25c**

Fig. 30. Pressure Gauge. Weight 2 lbs. **Price, $1.50**

Fig. 31. Relief Valve. Wt. 3 lbs. **Price, $4.00**

Fig. 26. Hose Connection. Weight ¼ lb. **Price, 25c**

Fig. 65. Hose Reducer. Wt. 3 ozs. **Price, 30c**

Fig. 1186. Double Cut-off. Weight 2 lbs. **Price, $2.00**

Fig. 49½. Brass Y, ¾-inch, for hose coupling. Weight 1 lb. **Price, 75c**

Fig. 1074. Brass Y, ¼-inch, for nozzle only. Weight ¼ lb. **Price, 50c**

Figs. 11-12. Brass Yerdon's Bands, ½ **or** ¾-inch. **Each, 5c; doz., 50c; Postpaid, 60c**

Fig. 13. Caldwell Bands.

Doz., postpaid, ½-inch, 25c; ¾-inch, 30c

Gem Hose Nozzle. One of the best for yard use. Weight 1 lb. **Price, 40c**

Fig. 25. Bamboo Extension. Has iron pipe inside of bamboo, threaded for nozzles and stopcock. **Price, with stopcock (Fig. 54)—**

	Bamboo	Iron		Bamboo	Iron
2 to 4 ft...	$1.25	$ .90	10 ft.....	$1.65	$1.20
6 ft.....	1.35	1.00	12 ft.....	1.80	
8 ft.....	1.50	1.10			

Aluminum Extensions, Per foot, 30c

Fig. 54. Stopcock. Weight ½ lb. **Price, 50c**

Fig. 18. Hose Coupling. 2½-inch shank, for heavy pressure spraying.

For ½-inch hose, price, pair, 65c, postpaid

Hose Couplings, for garden hose, ½-inch or ¾-inch, complete. **Price, 15c; postpaid, 25c**

Hose Washers. ½-inch, rubber. **Doz., 10c**

C. B. G. Lawn Sprinkler. Wt. 2 lbs. **Price, 35c**

THE "LENOX" NOZZLE

For Cold Water, Paint and Whitewashing.

Fig. 1495. Made especially for whitewashing and other methods of painting. It has a large opening inside, with rounding corners, to prevent clogging. The spray opening has steel disc and a lower cap, which can be removed for cleaning at any time. This nozzle is superior to any other on the market for this purpose. Wt., 5 oz.

Price, 75c

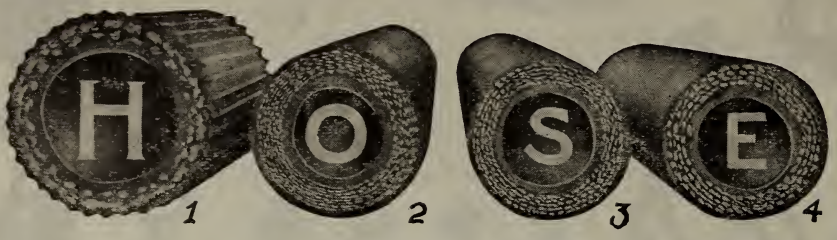
SPRAYOMETER

For testing lime and sulphur and other solutions. Registers from 0 to 35 Baume scale, and 1000 to 1300 specific gravity. A well made, reliable instrument that protects you against low grade sprays. Weight, 1¾ lbs. **Price, each, 75c**

SPRAYOMETER SET Consisting of one LI-SUL Sprayometer, one 12-inch plain Glass Cylinder in wooden container, with full instructions. Per Set—Weight ½ lb., **$1.25.**

For winter spraying use DIAMOND SPRA-SULPHUR, a granular compound 99.8 soluble, quickly dissolves in cold or hot water. **Stays in solution.** Will not clog or cut nozzles, contains no lime, does not crust, but spreads and penetrates. A superior and efficient form of sulphur. See page 101.

Florists' and Nurserymen's Supplies



No. 1 Corrugated
No. 2 Monarch
No. 3 Pomona
No. 4 Hood

For Spray Pumps and Gardens.

THIS season we are offering our customers a very complete and reliable line of spray and garden hose. We buy in very large quantities, direct from the manufacturers, which places us in a position to quote the following very low prices. Most of the brands we offer are manufactured especially for us, and can be obtained nowhere else

NOTE.—All our hose, excepting spray, is furnished in 50-foot lengths, and comes coupled **ready for use.** We will cut any of these hose in 25-foot lengths at an additional cost of 25c for couplings. We will cut ½-inch Pomona and Monarch Spray Hose in any length desired, at an extra cost of 65c for spray couplings in less than 50-foot lengths.

MONARCH SPRAY HOSE.—The Monarch, a new spray hose, is even a better grade than our well-known "Pomona." It is absolutely the best hose we can buy; the rubber is of exceptionally good quality and is very heavy; and we do not hesitate to recommend it to orchardmen, who must have a very high-grade and strong spray hose.

MONARCH SPECIAL SPRAY.— ½-inch only
Per ft., 18c

POMONA SPRAY HOSE.—Our well known Pomona is the best hose which can be bought at a moderate price. It has stood the test of time and hard usage, and has always proved good. **5-ply.**
Price, ½-in., per ft., 13½c; ¾-in., per ft., 15c

SUCTION HOSE.—This is an excellent grade of suction hose, and is what we furnish with our regular pump outfit.
Per ft., ¾-in., 27½c; 1-in., 30c; 1¼-in., 35c

AJAX SPRAY HOSE.—⅜-inch only.
Price, per ft., 10c

CORRUGATED GARDEN HOSE.—A new process, corrugated rubber hose, that will not kink or break. Especially recommended for florists and gardeners who use hose continuously.
Price, per ft., ½-in., 21c; ¾-in., 25c

"HOOD" GARDEN HOSE.—This is an excellent grade of garden hose. It is made with four heavy plies of canvas, and with good thick inside tubing. We have no hesitancy in recommending this for ordinary garden use.
Price, ½-in., per ft., 10c; ¾-in., 12½c

ST. HELENS GARDEN HOSE.—This is a good grade of garden hose of moderate price, and where a hose of medium price is wanted it will give excellent satisfaction.
Price, ½-in., per ft., 9c; ¾-in., 11c

PRUNING TOOLS

The Henckel Hand Shears

No. 220 Professional, 1 extra blade **$3.25**
No. 22 Special, 1 extra blade **3.00**
No. 205, Standard, No extra blade **2.00**

PICKING BAGS

Ideal ..... **$1.50 ea., three for $4.00**

NAIL STRIPPERS, with box **$3.50**
NAIL STRIPPERS, only **3.00**

BOX HATCHETS

Sayre **1.25**
Clark Bros **1.50**

LID PRESSES

Perfection Hand ..... **$ 9.00**
Lightning Foot Lever **26.00**
Northwestern Foot Lever **58.00**
Send for descriptive matter

FINGER COTS. Reinforced **5c** each, **50c** per doz.
Constricted **10c** each. **$1.00** per doz.

GEM NUMBERING STAMPS

Numbers 36 to 88 ..... **$ .60 postpaid.**
Numbers 88 to 150 ..... **.60 postpaid.**
Numbers 138 to 225 ..... **.60 postpaid.**
Set of three stamps ..... **1.50 postpaid.**

VARIETY STAMPS. One stamp. **$ .15 postpaid.**
Assorted, six ..... **.75 postpaid.**
Assorted, twelve ..... **1.20 postpaid.**

INKING PADS. Gem 1½x2¾. **.15 postpaid.**
No. 0 2¼x3½ ..... **.25 postpaid.**
No. 1 2½x4½ ..... **.35 postpaid.**

PACKERS' TALLY CARDS

Dozen ..... **.25 postpaid.**
Per 100 ..... **1.50 postpaid.**

TALLY CARD PUNCHES. Assorted characters
75c postpaid.

PAPER HOLDERS. Packers' Friend.
65c postpaid.

PEARSON'S CEMENT COATED BOX NAILS

No. 4 for Peaches, **No. 5** for Apples, **No. 6** for Pears. Broken Lots **8c per lb.** Wire for prices on keg lots, stating size and quantity wanted.

FRUIT PICKING LADDERS:

King, 6, 8, and 10 feet ..... **35c per foot.**
Metal-Age, 6, 8, 10, and 12 ft. . **45c per foot.**

FRUIT WRAPPERS, LINING PAPER AND LAYER BOARDS.

Write for firm prices, stating quantities wanted

SPRAYS, INSECTICIDES, POWDERS and WASHES

THE great improvement in Sulphur and Arsenate of Lead Sprays and methods of manufacture have not only reduced their cost and the risk and expense of preparing and using them but have also increased their efficiency, and it is now possible to secure a dependable and uniform product of a known strength that is easy to use and that will give profitable and satisfactory results.

SPRA-SULPHUR—Dry

SPRA-SULPHUR is a granular compound that quickly dissolves in cold or hot water—stays in solution—will not clog or cut nozzles and is a superior and efficient form of sulphur for destroying SAN JOSE and other SCALE INSECTS and all FUNGUS diseases that can be controlled in the dormant season, and as a SUMMER SPRAY for APPLE SCAB, APHIS LARVAE, MILDEW and other Fungus troubles. The lime in Lime-Sulphur causes the solution to quickly form a crust, on striking the tree or scale which arrests its action. **Spra-Sulphur contains no lime, does not crust, but spreads and penetrates.**

100 pounds equals a 600 pound barrel of Lime-Sulphur Solution

Costs less and does better work, no leaky barrels, no waste, keeps indefinitely and you pay no freight on water.

SPRA-SULPHUR is packed in airtight, friction-top tins and should be kept tightly covered until ready to use, as it is so readily soluble that if exposed to the air it will attract sufficient moisture to dissolve it. But if kept sealed will keep indefinitely.

FOR WINTER SPRAYING when trees are dormant, use 10 pounds of SPRA-SULPHUR to 50 gallons of water. For control of Scale and Fungus diseases.

FOR SUMMER SPRAYING, when trees are in leaf, to control **Apple Scab, Aphis Larvae, Mildew,** etc., use 1 ½ pounds to 50 gallons of water.

When ARSENATE of LEAD is added for codling moth and all chewing insects make your sulphur solution first, then add Arsenate of Lead, "CORONA DRY POWDERED" ¾ of a pound to 50 gallons of solution. If paste form is used, 1½ pounds to 50 gallons is needed.

Prices:

1 pound	20 cents	10 pounds	$1.25	50 pounds	$4.00
5 pounds	75 cents	25 pounds	2.50	100 pounds	7.50

Spra-Sulphur is not as harmful to your skin nor as corrosive as lime-sulphur

Spra-Sulphur is manufactured in Oregon under the original patents (granted to Chas. E. Hite, filed in 1910 and recently reissued) covering the exclusive right to the use of all fixed alkalies such as soda ash (sodium carbonate) and all similar compounds, with sulphur in the manufacturing of spray materials.

Scalecide

The best miscible oil spray for San Jose scale and soft-bodied, sucking insects. Also contains a powerful fungicide, which will control fungus diseases that are controllable in the dormant season.

This assertion is not based on a single test on ten or a dozen trees, but on actual work in great commercial orchards, where thousands of gallons of spray were used. "Scalecide" is a petroleum oil that mixes readily with cold water in any proportion, and stays mixed. It is not necessary to use an extra tank or barrel, and no hot water should be used. Prepared by adding one gallon of "Scalecide" for every fifteen or twenty gallons of water, right into your spray tank. No crude oil is used in the manufacture of "Scalecide," all the light and heavy oils that might prove injurious being removed—**but all of the soluble sulphur is retained;** this has the **insecticidal value.** That **"Scalecide" is a satisfactory and dependable remedy for San Jose Scale is attested by the records of some of the largest commercial orchards in the United States.**

Free sample and full information on request.

PRICE per qt., 50c; gal., $1.25; 5 gals., $5.00; 10 gals., $9.00; 50-gal. bbl., $35.00.

Diamond Lime and Sulphur Solution

For San Jose Scale.

You can not afford to risk a cheap open kettle product. Be safe. Use the best.

Diamond Lime and Sulphur Solution is prepared in pressure tanks by steam, and is always uniform and of the highest efficiency.

The "Lime and Sulphur" Solution for San Jose Scale is endorsed by experimental stations and state horticultural societies of all the fruit-growing states as the standard preparation for exterminating San Jose Scale on all deciduous trees.

Our Lime and Sulphur Solution tests 30 Baume Scale, is made of the purest and best quality of Sublimed Sulphur and of Lime, is a clear, deep cherry colored liquid, free from sediment, and is all ready to mix just as you get it. Merely add 11 gallons of water with each gallon of the Lime and Sulphur Solution. There is no sediment to clog the sprayers. No boiling to be done, which saves fuel, time, labor and annoyance. It is always alike and uniform in strength and results.

Price, 1 qt., 25c; 1 gal., 75c; 5 gals., $2.00; 10 gals., $3.75; 50-gal. bbl., $9.00.

"GARDEN PESTS and Their Control," a useful booklet for growers, mailed free on request

Poisonous Sprays Cannot be Mailed, but Must go by Express or Freight

"CORONA" Arsenate of Lead

DRY POWDERED

Contains only ARSENIC and LEAD OXIDES. NO FILLERS

"CORONA" carries the highest possible persentage of arsenic oxide—33%—and is **always uniform.**

Mixes Quickly and Easily. Stays Mixed Longer and Sticks better to leaves, branches and fruit than Any Other Arsenate.

No sediment—No lumps—No waste—Never clogs nozzle

"CORONA" Dry Powdered Arsenate is a Light, Fluffy Powder that cannot freeze, dry out, cake or loose its strength—is always uniform and requires only 1 pound to 50 gallons of water. *Efficient, Economical and Convenient. Highest Percentage of Killing Power.*

PRICES: ½ lb. 25c; 1 lb. 40c; 5 lbs. $1.75; 10 lbs. $3.00; 25 lbs. $6.50; 50 lbs. $12.00; 100 lbs. $23.00; 200 lbs. $44.00

"CORONA" Powdered Arsenate is used exclusively in the largest commercial orchards of our great fruit producing sections where results have demonstrated its greater efficiency and economy.

Much prefer "Corona Dry" to other Arsenates. Easier to handle, easier to mix, keeps indefinitely.
CHURCHILL HDW. CO.
Wilbur, Ore.

We used "Corona Dry" exclusively in our orchards, comprising some three hundred acres. It gave the best satisfaction of any lead we have ever used.
NORTH PACIFIC FRUIT DISTRIBUTORS,
Hood River, Ore.

Lime-Sulphur Solution Combined With Arsenate of Lead for Summer Spray

We have found in our experience that the combination of Lime-Sulphur solution with Arsenate of Lead for summer spray for apples and pears has given splendid satisfaction used in the following manner:

50 gallons of Arsenate of Lead solution should be prepared and to this add 1½ gallons of Lime-Sulphur solution, standard strength (30 degrees Baume). First application should be made when the calyx falls; the second when the apples are about the size of walnuts; third, during the month of August.

Preparation should be used as soon as mixed and not allowed to stand for any great length of time.

Automic Sulphur

This is a non-caustic paste fungicide, for use during the growing season on all classes of fruit trees, to prevent scab, mildew and for the control of a great many insect pests. This will control Apple Scab better than any other fungicide on the market.

300 pound barrels	per	pound	**$0.09 ½**
100 pound kegs	"	"	**.10**
50 pound kegs	"	"	**.11**
25 pound kegs	"	"	**.13**
10 pound kegs	"	"	**.16**
5 pound kegs	"	"	**.20**

New—PARIS GREEN PASTE

Sticks to foliage, stays in suspension and is guaranteed not to burn foliage.

Here is a paris green paste or stearate that is claimed by the manufacturers to have two and a half times quicker killing efficiency than paste lead arsenates, on account of its larger percentage of arsenic oxide (over 30 per cent). By the process of manufacturing, the water soluble arsenic is removed, eliminating all danger of burning foliage. Paris green paste spreads and sticks; rain will not wash it off.

Price, 1 lb., 25c; 5 lbs., $1.20; 12 ½ lbs., $2.95; 25 lbs., $5.75; 50 lbs., $11.25; 100 lbs., $22.00.

WARNING: Do not combine PARIS GREEN PASTE with Lime-Sulphur.

Tree Tanglefoot

For caterpillars, moths and worms. Protects against all climbing insects. One pound makes a band 9 feet long.

Price, 1 lb., 30c; 3 lbs., 85c; 10 lbs., $2.65; 20 lbs., $4.80.

Spokane Seed Company's APHISCIDE

Our Best Summer Spray for Roses

A clean, efficient spray for aphis, thrip, and kindred insects on plants of any kind. Specially fine for house plants, as it has no offensive odor and will not injure or stain the plants.

Price, qt., 25c; wt., 3 lbs., gal., 60c

Knoxweed

A single application of Knoxweed kills Plantain, Thistle or any Noxious Weed—Top and Root. Sold under a positive guarantee.

Price, Dropper can, 50c; ½ gal., $1.50; gal., $2.50.

BLACK LEAF "40."—Latest and best tobacco spray. **1 lb. makes 170 gals.**
Oz., 25c; ½lb. can, 75c; 2lbs., $2.50; 10lbs., $10.75

BORDEAUX MIXTURE.—(Lion Brand.) For fungi—in liquid form. Dilute with 49 parts of water. **1 qt., 50c; wt., 4 lbs.; 1 gal., $1.60**

BLUESTONE.—(Vitriol.)
Lb., 25c; per 100 lbs., market price

PARIS GREEN.—(Corona.) The standard of purity. Guaranteed superior to other makes.
Price, ¼ lb., 15c; ½ lb., 25c; lb., 40c; 2 lbs., 75c

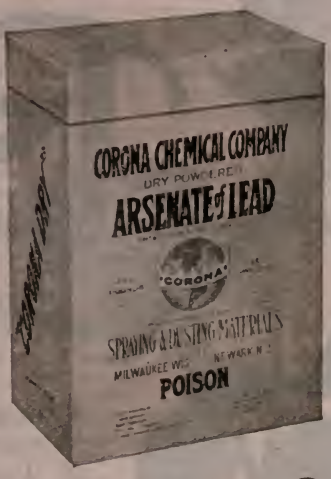
FISH OIL SOAP.—For aphis, plant lice, etc.
1 lb., 10c

Sprays, Spray Material and Washes—cont.

Poisonous Sprays Cannot be Mailed, but Must go by Express or Freight

"CORONA DRY"

The Universal Insecticide



"CORONA DRY" is a chemically pure arsenate of lead, containing one-third arsenic—the most effective poison known for leaf eating insects—and is closely combined with the pure lead in such a way as to leave no free arsenic to burn foliage.

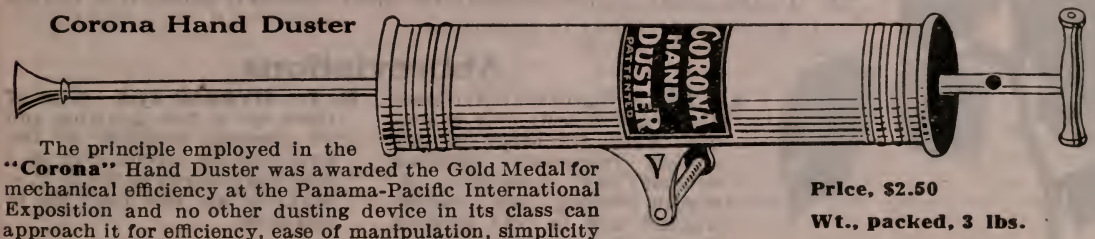
A safe, inexpensive, easily applied and efficient remedy for all chewing garden pests—and for use on fruit trees, berry bushes and plants that will insure perfect fruit and clean vegetables.

PRICE	½ lb.	1 lb.	5 lbs.	10 lbs.
	25c	40c	$1.75	$3.00

Also in 25, 50, 100 and 200 lb. pkgs.

"CORONA DRY" is best applied with the new CORONA HAND DUSTER, specially made for doing rapid and effective work over large areas of trees, vines, bushes and plants; but for small yards or gardens with no trees, a less expensive duster or powder gun will do the work.

Corona Hand Duster



The principle employed in the **"Corona"** Hand Duster was awarded the Gold Medal for mechanical efficiency at the Panama-Pacific International Exposition and no other dusting device in its class can approach it for efficiency, ease of manipulation, simplicity and durability.

Price, $2.50

Wt., packed, 3 lbs.

CORONA DUSTING SULPHUR. — A highly refined pure sulphur reduced to an impalpable powder specially for dusting purposes. The use of this finely powdered sulphur in the summer season for fungus diseases of fruit and vegetables is equally as effective as Lime-Sulphur; is more easily applied and there are no harmful results as it is a pure, non-poisonous sulphur.

Price, 15c per lb.; $11.00 per 100

CORONA DRY AND CORONA DUSTING SULPHUR — Mixed in equal parts by measure, is a complete and satisfactory summer spray for insect pests and fungus diseases; more easily, quickly and effectively applied than other sprays, and is much more economical.

Write for the Corona booklet "Garden Pests and Their Control", of great value to all growers

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BLUE LABEL SLUG DESTROYER.—This is an efficient dusting powder that will positively kill slugs and keep them away from young plants. Full directions on each package. Wt., 2 lbs. Put up in **25c** packages.

BUG DEATH.—A non-poisonous insect-killing powder that is in high favor among gardeners for cabbage, tomato and cucumber bugs, etc. Use 12 lbs. per acre.—**Per lb.,25c: 100 lbs.,$15.00**

BUHACH. — Oz., 15c; ¼ lb., 50c; 1 lb., $1.25

HAMMOND'S SLUG SHOT.—For destroying slugs, cabbage and turnip flea, currant worms, etc. **Per lb., 15c; 5-lb. pkg., 50c**

HAMMOND'S GRAPE DUST.—To prevent mildew on roses, grapes, and gooseberries. **Per lb., 15c; 5-lb. pkg., 50c**

HELLEBORE.— ¼ lb., 15c; ½ lb., 20c; lb., 35c

KEROSENE EMULSION.—An excellent spray for wooly aphis and clover mite. **Qt., 50c; wt., 3 lbs.; 1 gal., $1.25**

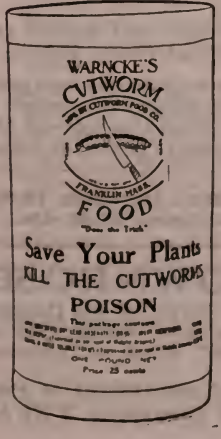
NICOTICIDE.—The best fumigant and spray for greenhouse work. Kills aphis, red spider, mealy bug, thrip, etc. **1 oz. bottle, 25c; 2 oz. bottle, 50c; Pint can, $2.50; qt., $4.50; gal., $15.00**

SULPHUR, Powder.— Lb., 5c; 100 lbs., Market price

TOBACCO DUST.— Lb., 10c; 10 lbs., 75c; 100 lbs., $6.50

POTASSIUM SULPHIDE.—(Liver of Sulphur.) One of the best preventatives of mildew on roses and berry bushes. Dissolve ½ oz. in one gallon of hot water. When cold apply as a spray. **Price, 1 oz., 10c; 1-lb. can, $1.00**

AVENARIUS CARBOLINEUM.—For preserving any kind of timber above or below ground. **Qt. can, 50c; wt., 4 lbs.; gal., $1.50; 5 gals., $7.00**



Cut Worm Food

Use a teaspoonful to a plant or hill.

Cut worms are very fond of this special preparation which is eagerly eaten by them in preference to the plants. A careful test proved 95% of the applications effective on Melons, Cucumbers, Cabbage, Cauliflower, Squash, Tomato and Flowering Plants. Easily applied by sprinkling around the plants and will not injure them in any way.

Price, 1-lb. pkg., 25c

Poison cannot be mailed

DIAMOND QUALITY Roses

DIAMOND QUALITY ROSES are large, sturdy, two-year-old, field-grown roses that will give you splendid flowers the first season. They are true to name and our list includes the best of the well known popular varieties, the most meritorious of recent novelties and the Gold Medal roses of famous European growers.

YOUR ROSE ORDER entrusted to us will insure careful selection and no substitution. If you do not find what you want in this catalogue write us. Our excellent connections with the great centers of production enable us to supply any variety in commerce.

Abbreviations

T.—TEA.—One of the best classes of roses, and truly ever blooming. They are hardy in this section, frequently wintering without any protection, although during our coolest weather and in cold sections they should be protected with a covering of fir boughs, straw or burlap.

H.P.—HYBRID PERPETUAL—The hardiest of all roses, vigorous in growth and easy of culture, producing large flowers, fine in form and fragrance.

H. T.—HYBRID TEA—Most of these are as free flowering and as constant bloomers as the teas, and are hardier, but, as a rule, not so hardy as the H. P.'s. Many of our best roses are in this class.

Other Abbreviations that are often used are: **S.—Single; H. B.—Hybrid Briar; Wich.—Wichuriana; N.—Noisette; Poly.—Polyanthus; Pern.—Pernetiana.**

PLANTING AND CARE

In our favored section, Roses attain a perfection seldom equaled, but you can not expect them to thrive and bloom unless you care for them. We offer the following simple suggestions.

SOIL—Any good, well-drained garden soil, enriched with fertilizer, will give excellent results. If heavy clay soil mulch well with burnt earth and manure, rotted sod or leaf mold.

FERTILIZER — Our odorless fertilizer, Bone Meal, Tankage of Blood, will give excellent results, and should always be applied after the plants start their growth.

WATERING.—When setting out, water regularly until roots are well set; then about once a week unless the ground is very dry; in such cases more often. Do not get the foliage wet after a hot day. This causes mildew.

FINALLY.—Keep the surface well worked around the plants. This is as necessary as water or fertilizer. When planting cut back freely, and the bush will recover quickly.

SHIPPING.—We always send all our two-year-old rose bushes charges collect by express or freight, packing them so they will carry safely even though they should be on the road for two weeks or more.

If necessary, we can send small two-year-old bushes by mail at an additional cost of 7c each to cover postage, but in such cases we always prune the tops and roots ready for planting.

PRICES.—35c roses, $3.00 doz.; 40c roses, $4.00 doz.; 50c roses, $5.00 doz.; 60c roses, $6.00 doz.; 75c roses, $8.00 doz.; $1.00 roses, $10.00 doz.

WESTERN GROWN ROSES Are ready for Fall delivery in October—**Imported Roses** should reach us in late November and December. Most all stock offered for Fall delivery is budded 2-year Field Grown Roses, as many varieties do not give good results grown on their own roots. But for those who prefer "own root" Roses we can secure most varieties.

We offer a splendid assortment of Popular roses and the best of the new ones, and can secure any variety in commerce, TRUE to NAME. See Autumn catalog.

Hybrid Tea and Tea Roses

OPHELIA

(See Color Plate, Back Cover)

(H. T.) This wonderful new and delightful rose, with orange salmon buds, the gracefully reflexed petals, shading to dainty pink, the open flowers of great refinement and rare and lasting beauty need only be known to rank as a leader among our finest garden roses. The foliage is clean, dark and leathery—the growth vigorous and free, producing long canes, every one crowned with a perfect flower. Blooms early and continuously. By special arrangement we will have a splendid stock for delivery after March 1st, from 3-inch pots; fine large plants—at a price that should place "Ophelia" in every rose garden.

Prices—2 year Field Grown Plants, $1.00. From 3½ in. Pots (after March 1st), Each, 50c; Dozen, $5.00.

GRUS AN TEPLITZ or VIRGINIA R. COXE.—(H. T.) Color, fiery crimson, with a dark velvety sheen, very fragrant. The freest blooming rose.

KAISERIN AUG. VICTORIA.—(H. T.) A beautiful rose with elegant, large pointed buds and very large, full double flowers; color delicate creamy white; deliciously fragrant. A strong, healthy grower and constant bloomer.

LA DETROIT.—(H. T.) A beautiful shell-pink shading in the center to a soft rose pink. Reverse of outer petals creamy-flesh tint, strong, healthy grower; prolific bloomer; delightful tea fragrance.

LA FRANCE.—(H. T.) Both flowers and buds are of grand size; color, a silvery rose, changing to pink. A general favorite. Sweetest of all roses.

SOUV. DE PRESIDENT CARNOT.—(H. T.) Lovely shell-pink, delicately tinted with golden fawn on rich creamy white. Superb for bedding in open ground. Makes splendid buds for Summer cutting.

RICHMOND.—(H. T.) The most vivid of everblooming red roses, buds and flowers of the most perfect and desirable form. The best of its color.

MY MARYLAND.—(H. T.) Beautiful, bright pink, with paler edges; delightfully fragrant; robust grower and very free flowering; flowers full and good keeper. The best pink of its color; especially fine for florists, as well as being one of the grandest garden roses.

PAPA GONTIER.—(H. T.) Large and semi-double; a vivid cherry red color, shaded yellow, reverse of petals crimson.

MADAME CAROLINE TESTOUT.—(H. T.) A grand rose of the La France type, but with flowers larger and finer. Color, bright satiny pink; very fragrant and free in bloom. The official "Carnival Rose."

MADAME CECILE BRUNNER.—(Poly.) Beautifully shaped little buds in clusters, color soft light pink shaded to primrose. The "Fairy Rose."

MAMAN COCHET.—(T.) This is one of the most beautiful Tea roses we list. The color is a deep rosy pink, the inner side of the petals silvery rose.

WHITE MAMAN COCHET.—(T.) White, grand substance, immense size, exquisitely fragrant and a free bloomer; buds long and pointed.

Climbing Roses

CLIMBING MADAME CAROLINE TESTOUT Covered during the whole season with immense globular flowers of the same beautiful shade of pink as seen in the bush sort.

MADAME ALFRED CARRIERE.— Extra large, full flowers, very double and sweet, and a most profuse and persistent bloomer; color, rich, creamy white, faintly tinged pale yellow and blush.

REVE D'OR (Climbing Safrano).— Color apricot yellow, with orange and fawn tints; petals of superb and delicate texture.

LADY GAY—(Wich.) Cherry pink shading lighter. Very floriferous. A hardy pink climber of the rambler type.

CRIMSON RAMBLER—Flowers perfectly double, borne in great profusion; vigorous, luxuriant foliage.

Finest Hardy Perpetual Roses

For East of the "Cascades," or in sections where the winters are severe, this magnificent collection of choice hardy roses will give splendid satisfaction, as they will thrive and bloom freely where the Tea and Hybrid Tea roses would not prove satisfactory.

Two-year-old Plants, 35c each; $3.00 per dozen.

CAPTAIN HAYWARD—(H. P.) Immense flowers in great freedom, sweetly scented. Color deep glowing red shaded crimson. One of our finest red roses.

CONRAD F. MEYER—(Rug.) Beautiful silvery pink, of grand form and delicious fragrance, hardy in any climate, its handsome foliage makes it most valuable for a flowering hedge.

GENERAL JACQUEMINOT—(H. P.) Bright, shining crimson; very rich and velvety.

FRAU KARL DRUSCHKI—(H. P.) The white American Beauty. Makes splendid buds and immense flowers; perfectly double and delightfully fragrant; large, thick petals; bright, shining green leaves, elegantly veined; a healthy, vigorous grower, and a constant and abundant bloomer.

MABEL MORRISON.—(H. P.) Of purest white; velvety in appearance; petals thick and shell-shaped; very double and rounded.

MRS. R. G. SHARMAN CRAWFORD—(H. P.) Lovely deep rose pink, outer petals shaded pale flesh, base white, a new and unique shade. Large perfect flowers, free blooming; a grand Autumn rose.

PAUL NEYRON—(H. P.) Deep, shining rose, double and handsomely formed; blooms freely, the largest variety in existence.

ULRICH BRUNNER—(H. P.) A magnificent rose, extra large, bold flowers, full and globular; petals large and of good substance; color, rich, glowing crimson, elegantly flamed with scarlet.

CAPTAIN CHRISTY.—(H.T.) Flowers very large, of grand form, fragrant and lasting. Thornless growth, beautiful foliage. Color lovely shade of silvery pink.

RHEA REID—(H. P.) A new American rose which can best be described as being as red as a "Richmond," as large as an "American Beauty," with the fragrance of "La France," and blooms continuously, flowers being borne on long stems; very hardy and vigorous. Gold medal Paris, 1908.

Spray Calendar—When to Spray, What to use

Insect or Disease.	Plant Attacked.	What to Spray With.	First Spraying.
Codling Moth	Apple, Pear	Arsenate of Lead	Just before calyx cups close.
San Jose Scale		Scalecide, Standard Sulphur Lime Solution	When leaves are off the tree.
Oyster Shell Bark Louse	Apple, mainly	Standard Sulphur-Lime Solution	When leaves are off the tree.
Peach Moth or Twig Borer.	Peach	Scalecide, 1 part to 20 parts water.	When the insects appear.
Woolly Aphis	Apple	Scalecide, 1 part to 40 parts water	When the insects appear.
Aphis	Roses and plants	Aphiscide, Fir Tree Oil Soap.	Just as soon as the insects appear.
Cabbage Worm	Cabbage	Bug Death (non-poisonous)	Before the worms eat into the cabbage.
Cabbage Aphis	Cabbage	Scalecide, 1 part to 40 parts water	When the insects appear.
Slug	Pear, Cherry, Peas	Slug Shot, or Bug Death.	
Thrips	Roses	Thrip Juice, or Aphiscide	When the insects appear.
Cottony Scale	Pear, Currant	Scalecide, 1 part to 40 parts water.	When the insects become cottony (May).
Scab	Apple, Pear	Bordeaux	Just before blossoms open.
Blackspot Canker	Apple	Bordeaux, double strength.	Immediately after leaves fall.
Leaf Curl	Peach	Standard Sulphur-Lime Solution	Before buds burst.
Mildew	Gooseberry	Potassium Sulphide, 1 oz. to 2 gallons water	Just as buds burst.

Gould Spray Pumps WILL GIVE AND MAINTAIN THE NECESSARY PRESSURE TO SPRAY RIGHT. They are built for lasting service. See Page 94.

SPRAYING to be effective MUST BE WELL DONE—

"How to Spray—When to Spray—What Sprayer to Use" is a valuable and interesting book that tells all about sprays and sprayers. **We will mail this book to you free on request.**

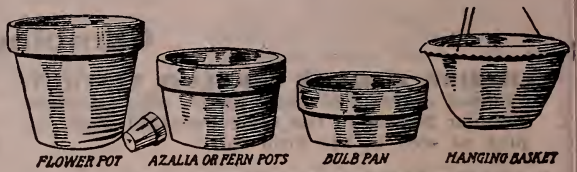
Flower Pots

We carry a large and complete line of standard red clay Flower, Fern, Azalea Pots, Bulb Pans and Hanging Baskets and can make prompt deliveries at right prices.

Florists, nurserymen and growers should send list of requirements for Special Prices.

FLOWER, FERN, AZALEA POTS OR BULB PANS ALL SAME PRICE.

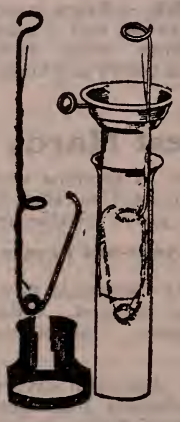
Size	Each	Dozen	Saucers Each
2-inch	$0.02	$0.20	
3-inch	.04	.35	
4-inch	.06	.50	$0.03
5-inch	.08	.75	.04
6-inch	.12	1.20	.06
7-inch	.16	1.75	.10
8-inch	.25	2.50	.12
9-inch	.35	3.50	.20
10-inch	.50	....	.25
12-inch	.75	....	.40
14-inch	1.75	....	1.10
16-inch	2.50	....	1.35



HANGING BASKETS

These are well made and are better than wire baskets, as plants do not dry out so quickly.

8-inch	Each	$0.40	Doz.	$4.00
10-inch	"	.50	"	5.00
12-inch	"	.75	"	7.50



Foster Rose Tubes

For Rosarians and Cut Flower Exhibitors

FOR SHOWING ROSES

The Foster Exhibition tubes with adjustable clips, enable you to transfer flowers from one position to another without disturbing their arrangement. A wire holds the flower firmly in any desired position. Tubes afford an ample supply of water close to the rose. Used at all English shows.

Price, each, 25c; doz., $2.75

PAPER FLOWER POTS

Low in price, moisture proof, unbreakable

2 ½ inch, 80c per 100, $6.00 per 1000; 3 ½ inch, $1.25 per 100, $10.00 per 1000; 4 inch, $1.50 per 100, $12.50 per 1000

Use Diamond Plant Food When Potting Plants. See Page 61.

Pot Labels, Plant Stakes, Mastica, Wire Hanging Baskets. See Page 89.

NOTE.—At above prices we will pack the pots carefully, but buyer must pay freight or express charges. We buy in carload lots and the wholesale trade, florists and nurserymen, are requested to send for special prices, stating number wanted.

Climbing Vines

CLEMATIS

Clematis is one of the most beautiful and useful climbers, the several varieties adapting themselves to every requirement. Their magnificent flowers, borne in great profusion in beautiful shades of lavenders, purples, reds and white, make them especially attractive. Clematis requires a rich loamy soil, but manure should not touch the roots. Cut out the weak and surplus branches in the spring, and tie the vine up well to its support. We offer the best of the hardy large flowering varieties.

DUCHESS OF EDINBURGH.—Double, white.
LAWSONIANA.—Light blue.
VILLE DE LYON.—Red.
RAMONA.—Beautiful lavender, best of its color.
MONTANA.—White, anemone-like flowers, May to July; very hardy, rapid grower.
HENRYI.—Fine, large, creamy white flowers; a strong grower and very hardy.
JACKMANII.—Intense violet purple, with a rich velvety appearance; distinctly veined. The most popular and finest Clematis we have.
MAD. ED. ANDRE.—A beautiful new variety; flowers red, large and abundant.

Choice plants of above sorts, each, 70c
Large plants, each, $1.00 to $1.25, postpaid

CLEMATIS PANICULATA.—A strong, rapid and vigorous grower; it produces sheets of medium-sized, pure white flowers of the most pleasing fragrance; it is perfectly hardy and well adapted for covering trellises or fences.

Choice plants, each, 40c to 50c; large, 60c to 70c.

Honeysuckle

BELGIAN.—Flowers yellow, blotched with red above; blooms all summer, fragrant. **Each, 60c**
JAPANESE.—Evergreen; fragrant flowers, white changing to yellow. **Each, 45c**
HALL'S.—Evergreen, very popular; white turning to yellow. **Each, 60c**

Jasmine

JASMINE NUDIFLORUM.—Branches drooping, enveloped with bright yellow flowers before leaves appear. **Each, 60c**
GARDENIA FLOWERED, CAPE JASMINE.—Free-blooming, pure white flowers, star shaped; foliage delicate; evergreen. **Each, 60c**

Ampelopsis

VEITCHEI "Boston Ivy."—Leaves glossy green, coloring bronze in fall; flowers small; berries deep blue. **Each, 40c**
QUINQUEFOLIA "Virginia Creeper." — Common American Ivy. **Each, 40c**

Trumpet Vine

BIGNONIA GRANDIFORA (Trumpet Vine). Strong climber; deciduous; flowers orange scarlet. **Each, 60c**
BIGNONIA TWEEDIANA.—Evergreen clinging; flowers canary yellow. **Each, 60c**

Dutchman's Pipe

ARISTOLOCHIA SIPHO.—A handsome bright green luxuriant vine, having large foliage and brownish, pipe-shaped flowers. A strong, rapid grower, valuable for trellis, porch or arbor. **Strong plants. Each, 60c**
KUDZU VINE.—A very rapid climber with large heavy foliage; bearing purplish flowers in racemes; during late August. **Strong roots, 40c; doz., $3.50**

Clematis Henryii

English Ivy

Large, thick, shining, leathery leaves; evergreen. **Each, 30c**

Wistaria

W. SINENSIS (Chinese Wistaria).—One of the most elegant and rapid growing of all climbing plants; grows 15 to 20 feet in a season; has long pendulous clusters of pale blue flowers in May and June and in Autumn.

Choice plants, each, 40c to 55c; large, 85c to $1.50.

W. MULTIJUGA.—Similar to above, but flowers are darker. **Each, 85c to $1.50**
W. BRACHYBOTRYS.—White flowering. **Each, 85c to $1.50**

"Diamond" Fancy Lawn Mixture

Growing tests have proved our "Diamond Quality" Lawn Grass to give satisfactory and permanent results, being specially prepared for our Western soils and climate, and will produce an evergreen velvety turf; it is free from chaff and foul seeds, weighing 23 pounds to the measured bushel. This is a guarantee of clean, plump seeds, as cheap chaff seed is very light.

Price, per lb., postpaid, 45c; freight or express, not prepaid, per lb., 35c; 10 lbs., $3.25

Sow one pound to 400 square feet, 10 to 15 pounds to a 50-foot lot.

WRITE US FOR SPECIAL MIXTURES FOR TERRACES, SHADY PLACES, DRY OR WET LAND.

"DIAMOND QUALITY" DAHLIAS FOR 1916

☞ *See Color Plate, Page 68*

For Kalif Collection

And Key to Classification

A corner of our Dahlia Field in the "Paeony Section"

All new varieties must first stand our field test before they are offered for sale.

IN THE SELECTION OF DAHLIAS only those varieties of known merit should be considered. The great Dahlia Specialists of Europe and America have set a high standard, established by their years of comparative trials and you will have greater satisfaction and better values from their tested varieties which we offer, and which have been officially recognized, than you can possibly obtain from untried varieties of doubtful origin.

OUR TRIALS ARE VERY EXTENSIVE and are conducted by a practical Dahlia expert of wide experience. All tests are made in the field without irrigation and the Dahlias we list represent the "survival of the fittest," the best of the standard varieties and meritorious novelties of the most famous producers, varieties that are recognized the world over. They are true to name, erect bloomers and good keepers.

Group of Cactus Dahlias

☞ **IT IS IMPORTANT** that your Dahlias be recognized varieties and **true to name.** If not, you cannot hope to exhibit them successfully.

CULTURE

DAHLIAS will grow to perfection in any good garden soil, preferably one that contains a little sand. Plant as soon as the frost is gone and the ground warm, cutting the tuber to a single strong eye, and placing it on its side at a depth of about 6 inches, in ground that has been previously well cultivated. An excellent way to start Dahlias is to sprout the tubers in a green house and set out the rooted plants. These are generally believed to give more and better flowers, but is more trouble than planting the bulbs. Rows should be four feet apart, plants 18 inches to 3 feet apart in the row, depending on whether planted for a hedge or for specimen plants. Cultivate thoroughly until ready to bloom, then deep tillage must cease and only the surface be lightly stirred, as deep cultivation at this time is fatal to blooming. Tall varieties should be staked.

If you use commercial fertilizer, do not apply until the plant starts growth, then work it into the top soil, 5 or 6 inches from the plant. Bone meal is an excellent fertilizer for Dahlias but must be applied early, as it is slow in action. When the plant is well up, say 6 to 10 inches, pinch off the top, leaving 2 or 3 joints. This will cause it to branch out into a more sturdy, bushy growth. Water freely.

REMEMBER WE CAN SUPPLY ANY VARIETY IN COMMERCE, GROWING MANY THAT WE DO NOT LIST. IF WE DO NOT have what you want, we can get it for you, ***true to name.*** ☞ See Color Plate, Page 68.

FINEST CACTUS DAHLIAS

From comparative tests in the field we have selected the following as being the best of their types and color. This list contains many of the newest Dahlias as well as the best of the older ones.

PRICES 15c DAHLIAS $1.50 dozen; 20c Dahlias $2.00 dozen: 25c Dahlias $2.50 dozen
35c DAHLIAS $3.00 dozen; 40c Dahlias $4.00 dozen; 50c Dahlias $5.00 dozen

Write for Prices by the Hundred.

Kalif

See Color Plate, page 68.

A giant flower, color a brilliant pure scarlet. The immense blooms are freely borne on long, strong stems and make a wonderful display. **Kalif** was awarded the highest honor of the German National Dahlia Society. **Each, $1.00**

Mrs. Warnaar

A gem among the many wonderful new Dahlias the Holland growers have given us. Color creamy white suffused pink of distinctive form. Awards of merit Haarlem and Amsterdam. **Price, each, $1.00**

Red and Shades

ARISTID GURTLER.–1–Flowers of enormous size, petals curved inward, color brilliant orange scarlet. **Each, 35c**

AUGENWEIDE.–1–Translated this means "a feast for the eyes." Color is bright rose with deep rose center, grows erect on fine stems, a full shapely flower. **Each, 50c**

BISMARK.–1–A most intense bright red, petals slightly incurved, perfect cactus type, has fine carriage of bloom well above the foliage, is early and always covered with flowers. **Each, 50c**

DORNROSCHEN.–1–Unique and remarkable, variable from carmine to brilliant red, to delicate pinks with blush suffusions; large and free blooming; long stems, erect; compact bush. **35c**

DREADNAUGHT.–1–A giant flower, of graceful form, full, with fine claw-shaped petals; color, deep crimson maroon; a good keeper and splendid flower for exhibition. **Each, 35c**

ERB PRINCESSEN REUSS.–3–A superb shade of blood-red crimson self, the best of its color of finest cactus form, one of the most satisfactory and pleasing reds. **Each, 35c**

H. W. SILLEM.—(Cardinal King).–1–Rich cardinal red, of perfect form, grand exhibition variety. **Each, 25c**

JOHN PEEL.–1–A deep rich crimson with lighter suffusion towards center; a distinctive form of true cactus type, a splendid keeper, with fine stems. **Each, 50c**

MARATHON.–1–A brilliant, purplish maroon; a large, full flower with broad twisted cleft petals—good stems. **Each, 35c**

MARIE PURRIER.–1–Extra large brilliant blood-red flower of fine full form, with slender dainty incurved petals; a free bloomer of fine habit of growth, flowers erect, good keepers. **Each, 50c**

MATCHLESS.–3–Dark rich crimson. **Each, 20c**

MINNIE BERGER.–3–One of the most pleasing bright, rich, red cactus dahlias ever produced; holds its color well, has fine stems, and as a cut flower is very popular with florists. **Each, 50c**

MRS. A. P. HOWARD.–3–Color fiery red with satiny sheen that lends unusual attractiveness to the large graceful flower, fine stems, vigorous and free blooming. **Each, 50c**

MRS. FERDINAND JEFFRIES.–7–Deep velvety garnet red, the long curved and twisted petals forming a magnificent flower of rare grace and beauty; one of the largest dahlias. **Each, 50c**

MRS. HENRY WIRTH.–3–Rich geranium red, very free flowering. **Each 35c**

ELLA.–2–A grand shade of deep rose of splendid cactus form. Long strong stems. Without a rival in the deep pink shades. **Each, 50c**

UNCLE TOM.–3–Dark maroon, medium size; quite free. **Each, 15c**

MRS. SUZANNE B. HOLMES.–3–A superb dark crimson-maroon of finest form and good substance. Good stems. One of the most beautiful of all dark Cactus Dahlias. **Each, 50c**

M. INMAN.–1–A bright orange vermillion of largest size and finest cactus form; long, narrow petals, an exhibition variety. **Each, 50c**

OLYMPIC.–1–Deep rich crimson; very large, petals incurved and of great depth; a strong grower. Fine exhibition dahlia. **Each, 75c**

OTHELLO.–1–A glorious full, large flower of deepest richest crimson, center almost black; finest true cactus form; one of the earliest. **Each, 35c**

PROGENITOR.–2–Bright carmine; fringed petals; a free bloomer of great beauty. **Each, 20c**

SIGNAL.–3–Brilliant crimson scarlet; height 24 inches; flowers large, of fine form; free blooming. **Each, 25c**

White

THE BRIDE.–3–A pure, glistening milky white, of great substance and of full rounded symmetrical form, grows erect, keeps well cut and the golden variegated foliage is very attractive. **Each, 50c**

GUNTHER.–2–Pure white with broad twisted petals on stiff stems. Large and beautiful. **Each, 50c**

LAWINE.–3–Fine large white, faint blush tint, erect, free-flowering; extra good. **Each, 35c**

RHEINKOENIG.–2–(King of the Rhine) Dazzling snow-white of magnificent form and largest size; although large, the flowers are daintily formed and of splendid substance, carried above the foliage on fine long stems, and are very lasting when cut. **Each, 35c**

Pink and Shades

BRITTANIA.–3–Beautiful salmon-pink. **Each, 25c**

COUNTESS OF LONSDALE.–3–Rich, rosy-salmon, very floriferous; one of the best. **Each, 25c**

FREDERICK WENHAM.–1–One of the largest cactus dahlias yet raised; in form the flowers are partially incurved. Growth upright; strong stems; color warm fawn-pink, with soft salmon at the center. **Each, 75c**

GALATHEA.–5–A delicate soft flesh pink of finest form; a flat petaled type listed in the cactus class by the originator. Galathea is a pleasing and most desirable addition. **Each, 60c**

GONDOLA.–1–Beautiful shade of pink; with bright old-gold penciling; large, with long incurved twisted petals, lighter at tips. **Each, 35c**

GWENDOLINE TUCKER.–1–A dainty rose color with lighter center, a finely formed, full flower. petals incurved, carried on long, strong stems, An exhibition variety. **Each, 50c**

HELENE.–3–Delicate, clear pink, with rich, creamy center, a beautiful flower on very long stems and the greatest bloomer of all. **Each, 15c**

KRIEMHILDE.–3–Blush pink; a prize winner; one of the finest dahlias. **Each, 20c**

MARGUERITE BOUCHON.–3–Brilliant rose with white center and white tips; very strong stems. A dainty and beautiful flower of large size. **Each 50c**

MRS. J. B. CHAFFEY.–1–A deep rich rose pink of superb form, flowering abundantly throughout the season and is of great value for cutting; stems strong, upright and long—a great beauty under artifical light. **Price, 50c**

MRS. WILLIAM H. TAFT.–1–Color the lovely pink of La France; rose, with lighter center; a large handsome flower with fine petals beautifully incurved; vigorous and free. **Each, 50c**

CACTUS DAHLIAS—Continued

Numbers denote type of flower. See page 68.

Yellow and Shades

CAPSTAN.–3–Orange-scarlet and apricot; one of the finest for cut flowers; dwarf-habit, free-bloomer, large perfect flowers. **Each, 15c**

DESDEMONA.–3–An exquisitely beautiful, daintily formed flower. The central shade is a lovely creamy canary shading to white at the ends of the slender, incurved petals; flowers very full, erect; borne on long stems. **Each, 50c**

DRAGON D'OR.–2–A magnificent deep rich yellow of mammoth size. Petals broad and deeply cleft at tips. **Each, 25c**

DR. ROY APPLETON.–1–The finest of the straight petal type, of perfect starlike form; color, a beautiful light lemon yellow, merging to light salmon, lighter at tips; plants of good habit with long stems and one of the best for exhibition purposes. **Each, $1.00**

ENCORE.–1–A pleasing shade of orange-buff, incurved petals, strong stems and perfect habit of growth.

FLOSSIE RIDEOUT.–1–Pure deep yellow with finest needle-like petals, sometimes with distinct pure white tips. **Each, 35c**

GELBER PRINZ.–3–A grand new yellow of Marechal Neil shade, a color never before obtained in a Dahlia. Flowers are extra large, and graceful form, full centers, carried on large stems and keep well, both cut and on the bush. **Each, 60c**

GENOVEVA.–1–An elegant distinctive flower of a pale canary yellow, with a beautiful faint greenish tinge suffusing the entire flower, which is large, with well filled incurving petals. **Each, 35c**

GOLDEN WAVE.–1–A magnificent clear deep yellow, of splendid form and largest size; petals are long and narrow, flowers full and symmetrical; one of the very best yellows. **Each, 50c**

GOLD REGEN.–1–True cactus type, twisted petals, deep bright yellow; long stiff stems; a splendid flower. **Each, 40c**

IVERNIA.–1–Beautiful form, of all around excellence; bright salmon fawn. **Each, 35c**

JOHANNESBERG.–1–A giant golden yellow of great brilliancy; the shapely, graceful flowers being well poised on long stems; a variety of the greatest merit. **Each, 50c**

LADY FAIR.–1–Primrose, tinged delicate pink, long incurved petals, free and attractive. **Each, 50c**

MODELL.–3–A beautiful clear waxy yellow, with a delicate plum blush sheen over tips of petals; a dainty, lovely flower of large size, perfect form, petals incurving, erect on long stems; one of the best bloomers and most vigorous growers. **Each, 50c**

MRS. WM. E. RUSSE.–7–A most pleasing yellow with chamois center, the broad twisted petals edged plum shading to old rose, extra fine stems; an unusually attractive well finished flower. **Each, 50c**

WODAN.–7–Magnificent flowers of largest size and pleasing form, color orange rose shading to old gold center, very vigorous. **Each, 50c**

Lavender

INDOMITABLE.–1–Long, very narrow petals, perfectly incurved; in color a rosy mauve; a beautiful, erect flower on good stems. **Each, 50c**

MAUVE QUEEN.–1–A beautiful true lavender with lighter center, full flower with finely quilled petals beautifully formed, incurved. **Each, 35c**

Variegated and Shaded

COMET.–2–Extra large, silvery rose, marked crimson, a very free bloomer, of good habit. **Each, 25c**

CURIOSITY.–1–Large full white flower with claw shaped petals, penciled rose carmine; a very beautiful, graceful and free blooming flower; good stems. **Each, 50c**

H. L. BROUSSON.–1–The extremely long and slender petals are daintily twisted and incurved in a most pleasing way. Color is salmon-rose on a pale yellow ground, showing lighter center and tips. Special awards. **Price, 75c**

RELIABLE.–1–A blending of yellow, brick-red and salmon; truly a grand flower. **Each, 25c**

Pom Pon Dahlias

These are pretty little globe shaped flowers on long stems, high above the dwarf foliage, fine for border keep well when cut.

"Pom-Pons" Make Dainty Cut Flowers—Try them

Pom-Pon Dahlias

BESSIE.—Creamy white, finely quilled. **Each, 15c**

CATHERINE.—Purest yellow; large. **Each, 20c**

DARKEST OF ALL.—Darkest pom-pon; perfect flowers. **Each, 20c**

FLOSSIE.—Small rose pink, very free. **Each, 20c**

GUINEVERE.—Pale salmon and yellow suffused and shaded pink with distinct gold tips. **Each, 20c**

GLOW WORM.—An odd and pleasing yellow-tipped cinnebar. **Each, 20c**

HYPATICA.—Amber shaded fawn edge and center lighter. **Each, 20c**

LILACEA.—Pale blush pink tipped rosy lilac. **Each, 20c**

LITTLE HERMAN.—Deep carmine, shaded garnet; tipped white. **Each, 20c**

NERISSA.—Soft pink, silvery tint; a beautiful new color. **Each, 20c**

POMPONIA.—Bright amber edged rosy cerise. **Each, 20c**

WHITE ASTER.—("Guiding Star.") A dainty, graceful, pure white flower with tips of petals cleft, giving a fringed effect. **Each, 20c**

MIGNON DAHLIAS Make splendid bed and border plants, their large single flowers come in rich colors, have long stems and are lasting when cut. See page 113.

Show Dahlias

The show or "quilled" Dahlia is the popular old fashioned type and has been so improved that many of our most magnificent flowers belong to that class.

A. D. LIVONI.—This grand old variety still remains the best pink of its type. **Each, 15c**

DIADEM.—Brilliant rich crimson of fine full form, free blooming, has good stems. **Each, 25c**

DREER'S WHITE.—A magnificent white of largest size and great purity, long stems. The best of its color. **Each, 35c**

FRANK SMITH.—Very dark rich red with light tips, variable; a fine full flower, good grower. **Each, 15c**

GOLDEN BOW.—A new, rich yellow of splendid form; has long stems, large flowers and blooms continuously. **Each, 35c**

GRAND DUKE ALEXIS.—A giant glistening, clear white flower, with the daintiest of lavender flakes or markings near center. **Each, 25c**

JOHN BENNETT.—Yellow, deeply edged scarlet; a very free bloomer and a desirable color. **Each, 25c**

LUCY FAWCETT.—Light canary yellow, with penciling of clear magenta. Large and very free. **Each, 20c**

MRS. ROOSEVELT.—A beautiful, delicate pink, of immense size, fine stems, perfect form, large and double, superb. *See color plate, page* 68. **Each, 35c**

NORMA.—Pure old gold with delicate plum suffusion that adds to its brilliancy; a full, well formed flower on good stems. **Each, 25c**

Mrs. Roosevelt

THOS. PENDRED.—Finest and largest of the pure yellows, a rich soft shade of golden yellow; perfect form, blooms freely and continuously, even in driest weather. **Each, 25c**

W. W. RAWSON.—Pure white overlaid with amethyst blue. Petals are quilled toward center but more open at outer part. The massive flowers often measure 7 inches in diameter; borne on stiff erect stems. **Each, 50c**

Decorative Dahlias

A Magnificent Collection of the Best of this Superb Type

DELICE.—(Decorative.) *See color plate, page* 68. Lovely shade of pink, broad petaled flowers with large stiff stems, very floriferous. *A fine, lasting cut flower.* **Each, 35c**

JEANNE CHARMET.—A beautiful lilac pink; each petal edged with white; flowers are very large and stems exceptionally long; very fine. Height, 4 feet. **Each, 25c**

Le Grand Manitou

GAIETY.—A superb new decorative, vivid scarlet, heavily marked with pure white; stems are long and flowers are produced freely; excellent for cut flowers. **Each, 35c**

LAVENDER QUEEN.—Clear, soft lavender; petals deeply serrated. **Each, 15c**

LE GRAND MANITOU.—(Decorative.) Immense perfect flowers, color a white ground splashed and striped with deep violet red; the finest variegated Dahlia in the decorative class. **Each, 35c**

MEADOW GOLD.—A lovely, clear lemon, shading to creamy tips, a free and constant bloomer, with long strong stems. **Price, 35c**

MLLE. OCTAVIE GRAINDORGE.—NEW. A magnificent pure white, of great beauty of form; an ideal flower in every way. **Each, 50c**

MME. A. LUMIERE.—Pure white with violet-red points, good. **Each, 25c**

MRS. WINTERS.—Snow white, large, beautiful form. **Each, 20c**

PRINCESS JULIANA.—Originating in Holland; flowers are pure white, of perfect form, foliage is rich dark green. A splendid grower and profuse bloomer, the magnificent flowers carried on long, strong stems, will keep for days when cut. Special Award Royal Horticultural Society. **Plants or tubers, each, 50c**

REISEN VON STUTTGART.—A bright blood red; seedling of the famous "Doazon," of great size and beauty. A free bloomer and good cut flower. **Each, 35c**

SOUVENIR DE GUSTAVE DOAZON.—The largest Dahlia to date· often growing 9 inches in diameter; constant bloomer, magnificent rich scarlet color; the greatest of all Dahlias. **Each, 25c**

Paeony Flowered Dahlias

Numbers denote type of Flowers.—See page 68.

Hort. Fiet.

See color plate Page 68

ORIGINATING in Holland, the Paeony flowered Dahlias have become a great specialty with these famous growers, and the marvelous beauty and magnificence of the new types and varieties fully justify their claims to distinction as the most satisfactory garden Dahlia, and as cut flowers are unexcelled.

The rare new shades, brilliant coloring, velvety finish and glistening sheen of their petals, their giant size, yet most graceful and pleasing forms are not found in any other class of flowers. The varieties we offer have received special certificates of merit at the Amsterdam and Haarlem Shows.

The blossoms are semi-double, of enormous size and the coloring is most brilliant and beautiful. They come in several pleasing forms generally with 3 to 5 rows of petals, which are long and broad, sometimes being beautifully curled and twisted.

Paeony Dahlias bloom more freely than any other class and are very vigorous, growing to a height of 5 to 6 feet, with their flowers on long stems above the foliage.

THE THREE NEW "HORTULANUS", varieties are superb, giant, graceful flowers that approach the decorative type in form and regularity, but are listed in the Paeony Class.

HORTULANUS BUDDE.–5–Opens a clear, bright crimson, changing to lovely rich old rose, shading to delicate fawn at tips and margins of the broad, velvety petals. A grand, giant flower, well poised on long strong stems. Special award of merit. **Each, 50c**

HORTULANUS FIET.–5–Bright salmon rose on old gold and orange, lighter towards tips. A most magnificent and truly marvelous flower, being a mass of blooms throughout the season. See cut. **Each, 50c**

HORTULANUS WITTE.–5–A wonderful giant white of great beauty, the broad, graceful petals are of good substance and of a glistening pearly white with fine large stems. First-class certificate. **Each, 50c**

AMERICA.–6–A glowing old rose overlaid with a rich shade of old gold. A shapely, full flower of 7 to 9 inches in diameter, with broad, gracefully twisted petals; flowers erect on long, strong stems. A magnificent and distinctive flower well worthy of the name "AMERICA". **Each, 50c**

ANDREW CARNEGIE. – 6 – Salmon pink, shaded bronze, center very prominent and rounded; petals are somewhat flat, 4 ft. **Each, 50c**

A. SCHUTTEVAER.–6–White ground with lilac suffusion. Rare and beautiful. **Each, 50c**

BEAUTY OF CROYDON HALL.–6–Shades of lilac, salmon and pink, a profuse bloomer of splendid form. **Each, 50c**

BERTHA VON SUTTNER. – 6 – Salmon pink, shaded yellow, erect, elegant form. Height 4 ½ feet. **Each, 50c**

CAESAR. – 6 – A magnificent semi-double, clear bright yellow flower of perfect form, borne erect on long stems; vigorous free bloomer. **Each, 50c**

CECILIA. – 6 – Cream yellow shading to white. Large, long stems, good. 5 ft. **Each, 35c**

COEUR DE LA PAIX.–6–Light purple, tinged terra-cotta. **Each, 50c**

DOMINION.–6–Bright rosy red, shading rose-pink toward edges; large full flower, ornamental foliage. **Each, 50c**

DR. K. W. VAN GHORKOM.–6–White shaded rose. Flowers large and free blooming. **Each, 50c**

DR. PEARY.–6–Brilliant, dark, velvety garnet red of magnificent form, the large twisted petals producing a graceful flower of great beauty. The small deep golden center enhancing the brilliancy of the pure self-colored petals. Flowers well poised on strong stems. **Each, 50c**

EILEEN KELWAY.–6 – Golden yellow over-laid cerise with yellow center. Very attractive, shapely flower. **Each, 50c**

GEISHA.–6–Geisha has a rich, bright golden yellow ground color near center; suffused and heavily marked with clear, bright red, shading toward points of petals into the clear yellow of the ground color; a beautiful deep golden center adds to the harmony of the color scheme. Flowers often attain a width of 10 to 12 inches, and the massive petals are twisted and curled in the most fantastic manner. **See color plate, page 68.** **Each, 50c**

GERMANIA.–6–A rich, dark, velvety wine color with suffusion of golden-yellow toward the edges of petals. Germania is free from the purplish tint that spoils other reds. **Each, 35c**

GIANT EDELWEISS.–3–This new type of Dahlia has true cactus petals of enormous length, curving inward at the tips; color a pure glistening velvety white, of great substance; the center is a brilliant golden yellow, a Giant duplicate of the famous Edelweiss of the Alps. Flowers are erect on long stems, 5 feet. **Each, 35c**

GLORY OF GROENEKAN.–6–Extra large flowers of finest form. Color a splendid golden orange. Strong grower; free flowering. **Each, 35c**

GLORY OF NYKERK.–6–Dark, violet red, overlaid with blackish crimson. A brilliant and attractive flower of large size and finest Paeony type; good stems, beautiful foliage. **Each, 50c**

H. J. LOVINK.–6–Dainty shade of lilac on white ground shading a clear yellow center. A large and pleasing flower. **Each, 50c**

PAEONY FLOWERED DAHLIAS—Continued

GREAT BRITAIN.–6–A magnificent, full petaled flower; color a pleasing light mauve with dark markings toward center. Of the largest size and most graceful Paeony type. **Each, 50c**

JAN OLIESLAGERS.–6–A grand, new clear deep yellow of fine Paeony form. Flowers of good substance, erect on long stems. **Each, 75c**

KING GEORGE.–6–Rich wine red, large full flower, very conspicuous and attractive. **Each, 50c**

LA HOLLANDE.–6–Dainty light rose with golden suffusion that deepens toward the center. A large and beautiful flower. **Each, 50c**

LEO XIII.–6–A giant yellow, rich, deep and brilliant. The full massive flowers are of ideal form with petals twisted and incurved, making a graceful fluffy flower well poised on strong stems. Without question the best yellow of its class to date. **Each, 75c**

MADAM VON BYSTEIN.–6–A magnificent lilac lavender, changing to light blue. A dainty fluffy flower of large size and lovely form; good stems. A graceful, refined flower of a new and beautiful shade. **Each, 50c**

MME. BUTTERFLY.–6–Soft salmon rose, having a rich golden sheen. **Each, 50c**

OREGON BEAUTY.–6–The rare color — bright fiery scarlet with golden sheen—its very distinctive form, giant size, long stems and vigorous free blooming habit make it a worthy Dahlia for any garden. **Each, 50c**

PHILADELPHIA.–6–In form this is a semi-double cactus of giant size; color, rich reddish-purple with brighter shadings, suffused and marked with white; very free flowering. **Each, 35c**

PRESIDENT FALLIERS.–6–Orange red of a most pleasing shade. The splendid shapely flowers freely borne on good stems. **Each, 50c**

P. W. JANSSEN.–6–A magnificent Dahlia of splendid form and distinctive coloring, being a lovely shade of old rose, marked and suffused with deep, rich golden yellow. **Each, 35c**

QUEEN EMMA.–6–A bright pink with darker pink penciling and narrow yellow shading in center of petals. **Each, 35c**

QUEEN WILHELMINA.–6–Large, pure white, central petals beautifully twisted and curled; very vigorous and free flowering. **Each, 35c**

RHEINGAU.–3–Large pointed petals, dark brilliant scarlet; immense size. **Each, 50c**

SHERLOCK HOLMES.–6–A pure, lovely lavender self-color entirely free from purple or reddish tints; large, full, gracefully poised flower on extra good stems. One of the best. **Each, 50c**

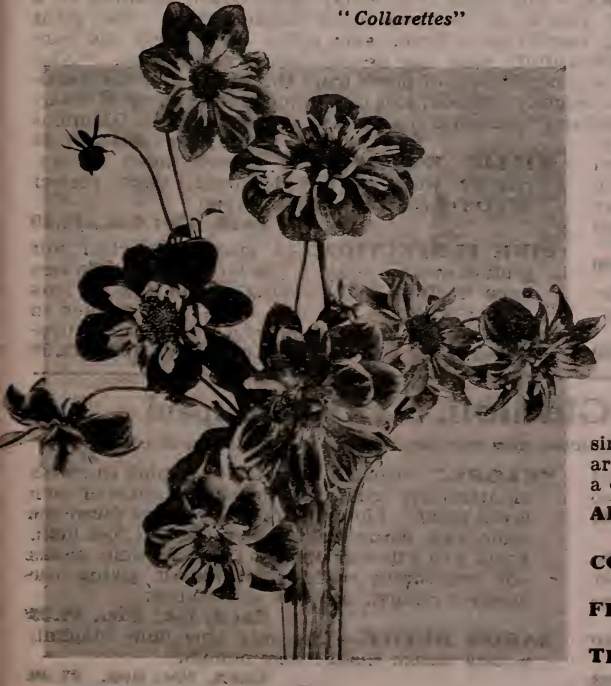
THE BRIDE.–6–A giant flower of graceful form. Color is silvery white, of full fluffy Paeony type, center petals twisted. **Each, 75c**

ZEPPELIN.–6–A rich, bright lavender of the largest size, well poised on big strong stems. A truly magnificent flower of great beauty. **Each, 50c**

Dwarf MIGNON Dahlias

NEW "MIGNON" DAHLIAS.—A new dwarf type of single flowered Dahlias, growing to a height of about 14 inches. Plants are bushy and symmetrical and produce in the greatest profusion brilliant large flowers of fine substance, borne on long stiff stems high above the foliage. They make a grand garden display and are long keepers when cut. Mignon Dahlias originated in Holland and were awarded 5 first-class certificates and 5 awards of merit at Amsterdam. We offer in four colors: **Brilliant Orange, Velvety Crimson, Yellow and Violet.**

Price, each, 15c; doz., $1.50



"Collarettes"

Mignon Dahlias for Beds and Borders

Collarette Dahlias

Collarette Dahlias are of French origin, having single flowers with an additional row of petals around the disc, forming a frill or collar usually of a contrasting color.

ALBERT MAUMENE.—Rosy mauve, suffused with lilac, white collarette, fine stems. **Each, 35c**

COLLARETTA.—Lovely rose-shaded pink, yellow and rose collarette; very pretty. **Each, 35c**

FINE FLEUR.—Shades of fawn, apricot and yellow. Yellow collarette, very distinct. **Each, 50c**

TITANIA.—Deep crimson, edged rosy lake, white collarette. **Each, 35c**

GLADIOLI

EACH SEASON adds to the list of magnificent, new and improved Gladioli, and the great beauty and attractiveness of the flower. Their exquisite coloring, vigor, ease of cultivation and freedom from insect pests and diseases are making them universal favorites that should have a place in every garden. They grow to perfection in any good garden soil, requiring little moisture, and come into bloom at a season when there are few other flowers. Once planted, they can be increased rapidly.

CULTURE.—Gladioli may be planted as early as the ground can be worked or as late as June. A sunny situation is preferred. Plant to a depth of 3 to 6 inches, depending on the size of the bulb. Largest bulbs are not always best, as some varieties do not produce large bulbs. Any garden soil will give satisfactory results, but if well enriched, cultivated and freely watered when bulbs first show, Gladioli will amply repay you for this additional care. If cut when the first bud opens and put in water, the flowers will open perfectly, keep for many days, and the coloring is richer, and more delicate, than if left to open on the plant.

10 Beautiful New Gladioli

SPECIAL (for trial).—Entire Collection, 10 Bulbs, $1.85, postpaid.

EUROPA.—Snow white without a trace of color or shading, the most sensational flower of its class ever produced. Special awards at every European show where exhibited. A grand flower of great beauty and substance. **Each, 25c; doz., $2.50**

GOLDEN KING.—Bright sulphur yellow with an intense crimson patch on the lower petal. One of the very best yellows. **Each, 25c; doz., $2.50**

HALLEY.—Salmon pink with creamy white blotch. Large flower and early bloomer. **Each, 10c; doz., $1.00**

JANE DIEULAFOY.—Creamy white, lower petals stained maroon. A shapely and attractive flower. **Each, 15c; doz., $1.50**

MRS. FRANK PENDLETON.—A clear brilliant salmon pink with bright blood-red blotch in throat, on lower petal. A truly superb flower of largest size, opens freely and keeps well and is considered one of the most valuable and beautiful new Gladiolus. Highest awards at the Boston and Baltimore shows. **Each, 25c; doz., $2.50**

NIAGARA.—The color is a lovely deep cream, shading to a canary yellow on the two lower inside petals. The giant flowers, carried on a large, erect spike, open freely and contrast beautifully with the broad, dark green foliage. "Niagara" won certificates of merit from the Massachusetts Horticultural Society, Boston, and the Dutch Bulb Society of Haarlem, Holland; and open class award of the American Gladiolus Society. **Each, 15c; doz., $1.50**

PANAMA.—A new seedling of America, identical except in color, which is much deeper pink than America. Spike long and the large flowers are well arranged and bloom out freely. A prize-winner everywhere exhibited. **Each, 20c; doz., $2.00**

WAR.—A deep rich, velvety crimson self color; large shapely flowers. Many consider "War" the most striking Gladiolus ever produced. **Each, 25c; doz., $2.50**

WILLIE WIGMAN.—A superb new variety, creamy white with red throat, large perfect flowers of the most pleasing type. **Each, 15c; doz., $1.50**

PINK PERFECTION.—A magnificent clear soft pink of great beauty. The large graceful flowers open freely, 6 to 8 showing at one time on long strong spikes. A single spike is a boquet in itself. The most wonderful pink ever introduced. **Each, 30c; doz., $3.00**

12 Select Named Gladioli, $1.00, Postpaid

This splendid assortment contains many choicest new varietes, best of their class and color.

AMERICA.—Exquisite shade of flesh pink-tinted lavender. A grand giant flower, hardy and free blooming. **Each, 6c; doz., 60c; 100, $4.00**

ATTRACTION.—Deep crimson, white center. **Each, 7c; doz., 75c**

GLORY OF HOLLAND.—White with inner throat slightly marked red. Tall, graceful, free flowering—sometimes tinged delicate pink. **Each, 15c; doz., $1.50**

CANARY BIRD.—A pleasing bright yellow. **Each, 10c; doz., $1.00**

"GLORY."—Color a delicate cream pink tint with an attractive crimson stripe in the center of each lower petal. Flowers large, paired and faced the same way, borne on strong stalks, 3 ½ feet high. From 4 to 8 flowers open at the same time, petals are exquisitely ruffled and fluted, giving the flower a refined, graceful appearance. **Each, 15c; doz., $1.25**

BARON HULOT.—The only true blue Gladioli; a dark indigo shade; very popular. **Each, 10c; doz., $1.00**

Select Named Gladioli--Continued

INDEPENDENCE.—Pleasing light scarlet flowers on long, straight spikes. **Each, 8c; doz., 75c**

KLONDYKE.—Light yellow, crimson maroon blotch **Each, 7c; doz., 65c**

MRS. FRANCES KING.—A pleasing light scarlet fine for forcing **Each, 8c; doz., 70c; 100, $4.00**

PEACE.—Large flowers of good form. Almost pure white; very strong grower. **Each, 15c; doz., $1.50**

PRINCEPS.—Giant flowers of richest, most brilliant crimson, with fine white blotch on lower petal; the most striking and beautiful of the newer Gladioli; a great favorite with florists. **Each, 15c; doz., $1.25**

TACONIC.—Bright pink marked with deep crimson and thin stripe of pale yellow. Strong grower. **Each, 10c; doz., $1.00**

Mixed Gladioli

DIAMOND MIXTURE.—Select named varieties with choicest Childsi Hybrids. **Each, 8c; doz., 75c; 100, $5.00**

GLADIOLI CHILDSI.—Of grand size and color, very showy, containing a large per cent of red and dark shades. **Each, 6c;doz., 60c; 100,$4.00**

GLADIOLI, FINE MIXED.—This mixture will produce a large variety of fine flowers unequalled for the price. **Each, 4c; doz., 35c; 100, $2.50**

GLADIOLI, GROFF'S HYBRIDS.—A mixture of Hybrids of all sorts, giving in one bed the greatest range of colors and variations. **Each, 5c; doz., 50c; 100, $4.00**

GLADIOLI LEMOINEI.—Mostly light shades, odd and fantastic markings. Brilliant and showy. **Each, 5c; doz., 50c; 100, $3.00**

CANNAS

WE are extensive growers of Cannas, and the following sorts are newer and better types that will give best results in our climate. Cannas require a rich, moist soil and should not be planted until all danger of frost is past. They are quick growers and the new flowering sorts bloom continuously until frost. Inexpensive, these charming ornamental plants produce rich tropical effects that cannot be excelled, and the grand new varieties offered are equally valuable for the beauty of their bloom. Let us know your requirements. We can supply the correct variety.

☞ **Prices, except where noted: Bulbs or plants in season, each, 25c; dozen, $2.50, postpaid.**

ALICE ROOSEVELT.—Deep crimson, compact green foliage; similar and superior to Alphonse Bouvier. Height 4 to 5 feet.

CARL LUTZ.—New. A splendid bright rich yellow of finest form; foliage leathery and luxuriant. A fine upright grower and profuse bloomer. Height, 3 ½ feet.

DR. NANSEN.—Dwarf yellow Canna with green foliage. Used extensively for bordering larger beds, its height being about two and one-half feet.

FEURMEER.—A magnificent clear bright red, flowers and spikes of large size and freely produced; foliage deep green. Height, about 5 feet. One of the very finest reds.

FIREBIRD.—New. Considered the best red-flowered, green-leaved Canna. Flowers are fiery, bright red, borne in immense trusses. Very effective when planted in large beds, tubs or single specimens. Height 4 ft. **Each, 75c; doz., $8.00**

FLORENCE VAUGHAN.—We offer a new seedling of this most famous canna that is a distinct improvement in growth, vigor and bloom; the color and markings are about the same only more brilliant and beautiful; a deep, bright yellow mottled and marked with bright red. Green foliage. Height, 4 to 5 feet.

GLADIOFLORA.—Flowers are of unusual shape, strongly resembling a large Gladioli. Color is crimson, changing to carmine rose, edged with gold. Green foliage. Very attractive. Height, three and one-half feet.

GUSTAV GUMPPER.—A rich, clear golden yellow—best of its color—of splendid form and habit—the large flowers are freely borne and are well above the foliage. Height, 3 to 4 feet.

HUNGARIA.—A beautiful soft rose pink—flowers in large trusses, early, freely, continuously—one of the most refined and attractive cannas ever introduced. Height, 3 ½ feet.

KING HUMBERT.—The mammoth flowers, in heavy trusses, are a brilliant orange-scarlet, with bright red markings, foliage is broad and massive and of a rich coppery bronze with brownish green markings; 5 to 6 feet.

MAID OF ORLEANS.—Large flowers of rich cream color, shaded and mottled with pink. Bronze markings on the soft olive-green foliage make this variety one of the most attractive among the green-leaved sorts. Four and one-half feet.

METEOR.—Considered one of the best reds, being a deep dazzling crimson. Exceptionally free bloomer. Green foliage. Five feet.

MRS. ALFRED F. CONARD.—Flowers are a superb salmon pink of large size borne very freely and continuously on large, erect spikes; very luxuriant green foliage; height about 4 feet.

MT. BLANC.—A compact vigorous grower, producing a massive spike of large, pure white flowers carried well above the glossy green foliage.

ROSEA GIGANTEA.—Finest of the new pinks, the rich, deep rose-colored flowers often measuring five inches across are borne in the greatest profusion, nothing finer has ever been offered; foliage green; 4 to 5 feet.

SAM TRELEASE—Improved.—Foliage green. Flowers are intense poppy red with narrow yellow line edging each petal. Shades gradually toward the throat to bright yellow, mottled and striped with red. Three and one-half feet.

STUTTGARTIA.—The large flowers are brilliant orange-scarlet with bright yellow band and markings. Flower spikes strong and erect above the foliage which is broad leaved, dark green and very luxuriant. Height 4 to 5 feet.

WABASH.—Sometimes called the "Bronze leaved Rosea Gigantea." The immense carmine-pink flowers combined with the deep purple-brown foliage makes this an especially attractive variety. Height 4 feet.

WINTZER'S COLOSSAL. — This is without doubt the largest flowering Canna, the blooms measuring 8 inches across. The flowers are an intense vivid scarlet of the orchid flowering type, retaining their brilliancy under the hot sun. Foliage green. Height 5 to 6 feet. **Each, 30c; doz., $3.00**

Perennial Border and Bedding Plants

A select list of Border and Bedding plants, beautiful and useful varieties that are easily grown. Fine, large, well-rooted specimens that can be safely packed and promptly delivered in perfect condition. If you contemplate large plantings or special effects, let us know your plans and requirements. We can supply in any quantity for every requirement at lowest prices.

Perennial Phlox

HARDY as an oak, increasing in beauty each year, few things are as beautiful and satisfactory. The marvelous new colors, beautiful foliage and easy culture, make this choice flower one of the most desirable. We offer the following fine collection, which we have grown.

Each, 20c; doz., $2.00

R. P. STRUTHERS.—Tall, rosy carmine, with claret-red eye; fine.

EUGENE DANZANVILLIER.—Tall, lilac, shading white towards the edges; large white center.

MRS. JENKINS.—Tall; the best tall early white for massing.

VESUVIUS.—Medium; one of the new seedlings; pure red with bright purple eye; a dazzling color.

SUNSHINE.—Dwarf; large, aniline-red with crimson-red eye and light halo.

GEO. A. STROHLEIN.—Medium bright scarlet with crimson red eye; does not bleach.

CARAN D'ACHE.—Medium; geranium-red with old rose shadings and white eye; very effective.

MME. PAUL DUTRIE.—Tall; a delicate lilac rose, reminding one of the beautiful soft pink Orchids.

ANTONIN MERCIE.—Medium; light ground color; upper half of each petal deeply suffused bluish-lilac, large white halo.

SELMA.—Tall; large flower; pale rose mauve with claret eye.

VON LASSBURG.—Medium; the purest white in cultivation; individual flowers larger than any other white.

CONSUL H. FROST.—Medium; pure red with bright French-purple eye.

COQUELICOT.—Fine flowering, scarlet, with crimson eye.

DIADEM.—Large flowering, pure white — dwarf.

GOLIATH.—Truly a giant in growth; color, bright crimson carmine, deeper eye.

PHLOX DIVARICATA CANADENSIS.—Blooms early April, has large, beautiful lavender flowers; grows 10 inches high.

PHLOX SUBULATA—(Moss or Mt. Pink).—Early spring flowering, the foliage being covered with bloom; useful for carpet bedding, cemetery planting or rockeries.

Larkspur—Delphiniums

HARDY LARKSPUR.—One of the most beautiful and useful border plants; is a great favorite in the English gardens and their famous specialists have produced magnificent new varieties of rare beauty of form and exquisite coloring; vigorous, free-blooming and hardy. The following named varieties are among the best—and the hybrids are the selection of a famous specialist.

KING OF DELPHINIUMS.—Giant semi-double flowers, deep blue with white eye; a vigorous free bloomer.

DUKE OF CONNAUGHT.—Large flower of bright velvety-blue with inner petals of rosy-lavender. The eye is nearly black which brings out the distinctiveness of this variety.

HANS DEKKING.—Very free flowering sort having flowers of a brilliant cornflower blue. One that should be in every collection.

LILACINA.—Delicate lilac color. Inner petals tinged with rose. Extra large semi-double flowers. Three and one-half feet.

PERFECTION. — Sky-blue petals suffused with rosy-lilac. Semi-double. Branching habit. One of the very finest and most beautiful Delphiniums we have ever grown.

LIZZIE VAN VEEN.—Tall sort with immense single flowers of soft azure-blue with white eye. Very free flowering. Excellent for cutting.

MASTERPIECE.—Lovely deep gentian-blue and plum. Reflexed flowers of immense size. Very beautiful and quite distinct. Tall.

QUEEN OF LILACS.—Large semi-double imbricated rosy-lilac flowers. Four and one-half feet. Fine bedding variety.

TRUE BLUE.—Intense deep blue with black eye. Single flowered tall sort. One of the very finest.

DELPHINIUM FORMOSUM.—Dark blue with white center.

BELLADONNA GRANDIFLORA.—Clear, delicate turquoise, dainty and beautiful; a strong grower, always in flower.

PRICES—NAMED VARIETIES--Fine Large 2-year Clumps. Each, 25c; per dozen, $2.50.
MIXED--Each, 20c; per dozen, $2.00.

Hardy Perennial Garden Plants—Continued

Once planted require but little care and bloom with increasing beauty each year. Plants marked 15c, are $1.50 doz.; 20c, $2.00 doz.; 25c, $2.50 doz., F. O. B. Spokane.

ACONITUM — Monkshood — Nepalus. Purple; 24 inches; July and August. **Clumps, each, 25c**

ALYSSUM SAXATILE COMPACTUM.—Bright yellow corymbs; showy Spring flowering plant which also flowers in Autumn. **Each, 25c**

ANEMONE JAPONICA.—Beautiful Fall blooming plants Pink or white. **Each, 25c**

ANCHUSIA ITALICA.—Tall growing hardy plant, with pretty blue flowers in large racemes. **Each, 25c**

ANTIRRHINUM.—(Snap Dragon.) Pink, Red, White, Orange, Bronze and Yellow. Tall and dwarf. **Clumps, Each, 25c; Small Plants, 50c doz.**

AQUILEGIA HYBRIDA.—(Columbine). An old favorite for Spring and early Summer. Fine for cut flowers. **Jatschants** — Red and yellow; **Rose Queen** — Rose; **Coerulea**—Rocky Mt. blue; **Skinnerii**—Scarlet and yellow; **Coerulea** — Alba; assorted colors. **Blue, violet pink.** **Each, 25c**

ARABIS ALPINA.—(Rock Cress). Low growing, fine for borders. Covered in spring with white blossoms. **Single, each, 20c. Double, each, 25c**

ARTICHOKE.—Ornamental garden plant, bearing edible buds that develop into giant thistle-like blooms. **Each, 20c; doz., $2.00**

CANTERBURY BELLS.—Pink, white, blue, large clumps. **Each, 25c; doz., $2.50**

CAMPANULA.—New Double White.—A dainty and beautiful flower, 2 to 2½ feet high, bearing spikes of large snow white, prettily formed, fully double blossoms. Pinch off the old flowers and the plant will bloom continuously. One of the best border or bedding plants ever offered. **Each, 25c**

COLUMBINE
(Aquilegia)

COREOPSIS.—(Golden Sunbeams.) Beautiful golden-yellow flowers on long stems; always in bloom; fine for cutting. **Each, 25c**

DORONICUM.—Early Spring flowering Marguerite-like yellow flowers. Fine border plant. **Each, 25c**

ENGLISH PRIMROSE.—Finest sorts, from pure yellow to deepest crimson-maroon; early, low-growing, fragrant. **Each, 25c**

FOX GLOVE.—(Digitalis). Tall Gloxinia Flowered. *Pink, White and Blue.* **Each, 25c; doz., $2.50**

GAILLARDIA GRANDIFLORA.—Splendid large flowers; combination coloring of yellow, brown, crimson, orange; height, 2 feet; bloom until frost; fine for cut flowers; hardy everywhere. **Each, 20c**

PERENNIAL ASTERS

GEUM.—(Attrocinium.) A splendid bed or border plant—erect habit—18 to 24 inches—bearing freely, dainty little double red flowers. **Each, 25c**

GYPSOPHILA PANICULATA.—Single and double; thrives during driest weather; elegant rock plants and very useful for cut flowers. **Each, 25c**

HARDY ASTERS.—Among the showiest of late flowering plants, blooming when most other flowers are past. The colors are dainty blues, shades of red and pink, and white. They are very decorative and lasting. **Each, 20c**

HELIANTHUS SPARSIFOLIA.—Superb new single sunflower of striking beauty; blooms late in the season. A real gem among hardy plants. We especially urge you to give this a trial. **Each, 20c**

HEUCHERA SANGUINEA. — Dainty alpine plant. Extremely hardy and easy to grow. Requires the shade of a rockery or fernery. The bell-shaped coral red flowers are similar in form to Lily of the Valley, borne on long wiry stems about 18 inches. **Each, 25c**

HOLLYHOCKS.—Hollyhocks require good soil, prepared by deep digging and working in well rotted manure; water during dry weather.

New Double and Single.—Red, yellow, pink, and white. **Large clumps, each, 25c; doz., $2.50**

IBERIS.—(Hardy Candy Tuft.) Sempervirens. White; flowers May to June, 8 inches high. **Clumps, each, 25c; doz., $2.50**

MARGUERITE MRS. F. SANDERS—(Annual). Valuable for conservatory or window garden in late winter or spring; excellent bedding plant during summer months; color, pure glistening white, the full fluffy flowers frequently measuring 5 inches across. **Each, 20c; doz., $2.00**

PLUMBAGO LAIPENTEA.—Fine edging plant, growing four inches high and covered all Summer with sky blue flowers. **Each, 20c; doz., $2.00**

PHYSALIS—Franchetta—Red fruit; flowers July to November. **Clumps, each, 25c**

HARDY PERENNIAL GARDEN PLANTS—Continued

Plants marked 15c are $1.50 doz.; 20c, $2.00 doz.; 25c, $2.50 doz., F. O. B. Spokane.

New Shasta Daisy *Alaska*

REDBECKIA.—Golden Glow.—Bears in greatest profusion immense double blooms, large as Dahlias, of the brightest, golden yellow; hardy everywhere. **Each, 20c**

REDBECKIA NEWMANI.—(Black-eyed Susan). Golden yellow ray petals around a dark center. Fine cut flowers. **Each, 20c**

SALVIA PATENS.—A beautiful plant of the purest blue, blooming from June to October. Is not quite hardy and needs some protection. One and one-half to two and one-half feet. **Each, 25c**

SHASTA DAISY.—(Alaska). This new "Shasta" is covered with immense, fluffy white blooms, with golden eyes, from July until late Fall; long stems; fine for cutting; one of our best hardy border plants. **Each, 25c**

STOKESIA.—(**Cornflower Aster.**) Blue; 18 inches; July to November **Clumps, Each, 25c**

SCABIOSA.—Blue; 30 inches; June to September. **Clumps, Each, 25c**

SWEET WILLIAM.—Old favorites for beds and borders. Brilliant and pleasing colors. **Nigricans**—Dark red; **Salmonens**—Salmon. **Rosens**—Rose; **Pink Beauty**—Pink. **Each, 25c**

VERONICA REPENS.—(Creeping Speedwell).—Slender compact plant with blue flowers. Thrives in the sun where grass will not grow, covering the ground in a short time. Fine for rock work. **Each, 20c**

VERONICA PROSTRATA.—Splendid for rock gardens and edges of borders; color deep blue. Blooms May to August. **Each, 20c**

WALLFLOWER.—(Dark and Light; single and double; mixed), good subjects for rock garden and spring bedding. **Each, 25c**

Sweet Violets

Price each, 20c; 8 sorts, $1.25, Postpaid.

ALASKA.—A grand sort, well adapted to garden culture, enormous double flowers of a deep blue-black color and powerful fragrance.

BARONESS ROTHSCHILD.—Similar in color and form to Princess of Wales, but blooms more freely; single.

LADY HUME CAMPBELL.—Large double flowers of a beautiful light blue color; very free-blooming and exquisitely fragrant.

CALIFORNIA.—Very showy and beautiful flowers of enormous size, deep violet blue; deliciously fragrant; single.

PEACOCK.—A charming variety having beautiful white flowers shaded with light blue; single.

PRINCESS OF WALES.—Flowers single, of gigantic size; color a very rich shade of blue, and extremely fragrant.

MARIE LOUISE.—A constant bloomer, producing great quantities of large, double flowers, lovely deep violet purple.

SWANLEY WHITE.—The finest and best double white violet in cultivation.

Oriental Poppy

The most brilliant and gorgeous of all garden plants; is hardy and succeeds well in any good garden soil, blooming in May and June, they are dormant thereafter until cool weather. We offer two rare and beautiful new sorts, besides the standard red type and hybrids.

SALMON QUEEN.—Rich salmon pink with coppery orange suffusion; deepest purplish black center and markings. A rare and splendid flower of largest size; vigorous and free blooming. **Each, 25c; doz., $2.50**

KELWAY'S HYBRIDS.—The graceful, bright-colored cup-shaped flowers are very attractive for garden or table decorations. **Each, 20c; doz., $2.00**

MAHONY.—A magnificent flower of the darkest richest color yet known in a poppy, almost a true dark mahogany. Large, free blooming; a splendid companion to Salmon Queen. **Each, 25c; doz., $2.50**

ORIENTAL POPPY.—Red. The old time favorite. **Each, 20c; doz., $2.00**

Popular Annual Bedding Plants

During the months of April and May we have thousands of the following bedding plants, price per dozen by express at buyers expense:

Alyssum	$0.30	English Daisies	$0.50	Lobelia	$0.30	Phlox	$0.30
Asters	.30	Forget-Me-Not	1.00	Marigold	.30	Salvia	.50
Carnations	.60	Geraniums, 75c to 2.00		Mignonette	.50	Stocks	.30
Cosmos	.30	Heliotrope	.50	Petunia	.50	Verbena	.30

For Description of these Flowers, see Flower Seed Department of our Annual Catalog

Mastodon Pansies

"Mastodon Pansies" in Bloom

From March until June we offer our famous "Mastodon" Pansy plants in full bloom—none finer in the world. Put up one dozen in a basket.

Price, 60c to $1.00 per basket by express, buyer to pay charges. They will surprise and delight you.

Giant Pansies

NEW GIANT PANSIES.—Our Giant Plants are in a class of their own and can not be compared to any other Giant Pansies, no matter where grown. We know they are unsurpassed in this or any other country. A trial basket will convince you. They are the best value ever offered in a bedding plant.

Each, 5c; doz., 50c; by mail, 75c doz.

MASTODON PANSY SEED

We offer a limited amount of this hand selected seed, DIAMOND MIXED

Per pkt., 25 cents **Large Trade pkt., $1.00**

Bleeding Heart

SPECTABILIS.—One of the most ornamental of hardy spring flowering plants, with elegant green foliage and long,drooping racemes of heartshaped flowers. This is deemed one of the finest of all hardy garden plants.

Strong roots, each, 30c, postpaid

Caladium

ESCULENTUM. — (Elephant's Ear.) — Grand tropical looking plant. A favorite for specimens on the lawn, or for bordering large sub-tropical groups. In deep, rich soil, if freely watered, they produce enormous leaves, frequently four feet long by three feet wide. Plant in the spring. Height 4 to 5 feet. **Each, 25c; doz., $2.00**

Miscellaneous Flowering Plants

The following list includes many of the most useful and beautiful plants for Baskets, Porch Boxes. Bedding and House Plants.

ABUTILON ECLIPSE.—Handsome variegated foliage and bright pendant flowers of scarlet and gold colors. Fine for vases and hanging baskets. **Each, 20c**

ABUTILON SAVITZI.—Elegant compact growing plant with pretty fringed foliage of a bright green color, distinctly edged with snow white. Equally desirable as a house plant as it is for bedding purposes. **Each, 20c**

CINNAMON VINE.—A beautiful vine of rapid growth, suitable for porches, trellises, etc. One of the very best quick-growing vines. **Large roots, 10c each; 3 for 25c**

COLEUS.—Fancy Leaved—Coleus are the most important of all the fancy leaved bedding plants. They also make very fine pot plants, especially if you have a warm room to Winter them in. Our collection is strictly up to date. **Each, 15c; 6 fine sorts, 65c**

CYCLAMEN. — Charming house plants of rare beauty; highly prized for their beautiful foliage as well as their orchid-like flowers, which are freely borne throughout the winter. **Choice plants, 25c to $1.50**

GERMAN IVY.—Waxy green leaves, strong growing vine for window and porch boxes or for hanging baskets. **Each, 15c**

GENISTA RACEMOSA.—(Shower of Gold). Elegant Spring blooming window plant, literally covered with golden yellow leaves. **Each, 20c**

HELIOTROPES.—Popular bedding and house plants noted for their fragrant flowers produced freely throughout the year. Four sorts, purple, blue, lavender and white. **Each 15c**

LANTANA, RED AND GOLD.—Grows eight inches high and is covered all Summer long with large umbels of red and yellow flowers. Certainly a fine Summer flowering plant. **Each, 15c; 12 plants for $1.50**

LANTANA, WEEPING.—A well-known basket and porch plant. Lavender colored flowers all Summer long. **Each 15c**

LOBELIA, KATHLEEN MALLARD.—Covered all Summer long with very large, double flowers of an intense deep blue color. Grand for planting near the edge of flower beds. **Each, 15c; per dozen, $1.50**

MESEMBRYANTHEMUM SPECTABILIS. — Quilled shaped, succulent leaves with large single thistle-like cerise pink flowers. Fine for baskets, vases or porch boxes. **Each, 15c**

PETUNIA, Irvington Beauty.—This new single-flowered petunia is at present a very popular bedding and window-box plant. Covered all season with beautiful light pink flowers veined green and shaded to white in the throat. **Each 20c; 4 for 65c**

PRIMROSE.—(Giant Obconica).—The freest flowering plant we know of, blooming continuously throughout the entire season. **Each, 25c**

SALVIA—(New Zurich).—A distinct and attractive variety of compact dwarf growth, of neatly rounded form, closely set with stiffly erect spikes of bright scarlet flowers. **Each, 15c; per doz., $1.50**

SMILAX.—For using as a green with cut flowers. Fine as a parlor or window plant. **Each, 15c**

VINCA VARIEGATA.—Leaves are a glossy green, broadly margined a creamy white. The best of trailing plants for window boxes. **Each, 15c; 2 for 25c**

VERBENA—(New Mammoth).—The Verbena is, next to the Geranium, the most popular of all bedding plants. **Each, 7c; 7 asst'd colors, per dozen, 75c**

WANDERING JEW—(Tradescantia). — White and Red Variegated. **Each, 10c**

BEGONIAS—Tuberous Rooted

FROM their early first blooming until cut down by frost, Tuberous Begonias display a mass of most gorgeous and brilliant coloring. They are distinct and unique, in wonderful shades of yellow bronze, white, reds, pinks, with thick waxy petals and grand ornamental foliage, never failing to excite the wonder and admiration of all who see them.

CULTURE.—The soil should be rich in leaf mould, or well-rotted manure, a little sand being beneficial. Start the bulbs inside in the early Spring, and transplant when danger of frost is past. They should be lifted in the fall before frost, dried and stored in sand in a cool place.

Single Flowering

These are of immense size, free blooming and very lasting. **Each, 15c; doz., $1.25; 100, $7.00**

Double Flowering

Often as full and beautiful as a rose, some of the white varieties resembling giant carnations. Price, separate colors:

Each, 20c; doz., $2.00; 100, $11.50

Frilled

Single frilled, having a heavy frill or fringe on the edges of the petals.

Each, 25c; doz., $2.50; 100, $17.00

OUR DIAMOND MIXTURE, containing all of above sorts. **Per doz., $1.50; 100, $10.00**

A good way to start Begonias and Gloxinias is to put the bulbs on a layer of moss in a box or flat, and cover with another layer. Keep moist, but not too wet; temperature about 70 degrees; this starts both top and roots; then pot for root development before transplanting outside.

Water Lilies

THESE beautiful and interesting plants can be easily grown in tubs made by cutting a barrel in half and setting one or both halves deep in the ground, to within a few inches of the top. Put in good loam soil, with one-third old manure, or better still is the soil from a swamp or lowland, using one-third of old, well-rotted manure; cover soil with a layer of sand one to two inches deep, allowing for a depth of six inches of water.

Water Lilies like a mild temperature, and still water, and will not succeed where a fountain is playing or where there is a strong or cold inflow.

NYMPHAE.—Hardy white.
Single roots, 40c, postpaid
Large roots, 85c to $1.75, prepaid

NYMPHAE.—Hardy yellow; fragrant.
Single roots, 60c, prepaid
Large roots, $1.75, prepaid

Parrots Feathers

Produces long trailing sprays of lovely green finely cut foliage set in symmetrical whorls; plant in a water tight vase or hanging basket, keeping water standing over the surface. A beautiful thrifty growing, hardy plant. Try it.

Good roots, each, 25c; doz., $2.50

Miscellaneous Ornamentals

Yucca

SPANISH BAYONET OR ADAM'S NEEDLE.—Has a fine appearance; the stems grow two or three feet above the ground; covered with large, bell-shaped flowers on laterals, forming a perfect pyramid; valuable for rockwork.

FILAMENTOSA.—Thread leaved, creamy white; July. **Plants, 2 feet, each, 75c to $1.00**

Pampas Grass

A noble ornamental grass, easily grown, producing long, pointed leaves and majestic, silvery white plumes, which are very valuable for winter decoration; grows 6 to 8 feet high.

Strong roots, each, 60c to 75c
Large specimen plants, $2.00 to $5.00

Tritoma (Pfitzeri)

EVERBLOOMING FLAME FLOWER—(or Red Hot Poker).—This new sort is of a rich orange-scarlet, blooming from mid-summer to latest fall; spikes 3 to 4 feet high; one of the very best of this useful class, which is hardy with slight protection, but winters best if lifted and stored in sand. These hardy perennials are unsurpassed as border plants or for mass effects.

Strong flowering roots 25c, doz., $2.50 postpaid

St. Johns Wort

(Hypericum Moserianum)

Low growing with yellow blooms; a drought resister. July and August. **Clumps, 50c**

IRIS

Japanese Iris

IRIS are of such easy culture and rare beauty that every one should grow them. They make a magnificent display either in clumps or border, blooming profusely and increasing rapidly, and are rarely troubled by disease or pests.

They are perfectly hardy in the open ground, and contrary to popular belief, do not require more water than other plants, although a moist situation is preferred, but any good garden soil will grow them to perfection.

If planted in light soil, depress the beds a little below the surroundings. This helps to collect and hold the moisture. Plant Fall or early Spring.

Japanese Iris (Iris Kaempferi)

Japan Iris is the largest and most wonderful of the Iris family, no flower of any kind surpassing its rare beauty of form, brilliance and variety of coloring, ranging from snow white through maroon, violet and deep blue; striped, variegated, veined and blended in the greatest profusion, producing effects that are truly marvelous and indescribable. Blossoms early summer. Japan Iris succeeds best in moist location, but will thrive in any good garden soil. Plant three inches deep, about 4 inches apart; divide the clumps every two years. Fertilize established beds while dormant, using stable manure, but do not apply after growth starts. There are hundreds of varieties, from which we have selected the following:

Double Varieties

HANA-AOI.—Bright violet blue shaded white to center.

OSHO-KUN.—Navy blue, purple center, late.

WAKA-MURA-SAKI.—Crimson, purple, blue shadings and blotches in center.

SENJO-NO-HORA.—Mottled and veined, red, purple and white.

KUMOMA-NO-SORA.—White, with a strongly marked sky-blue zone and mottled in the same shade.

YEZO-NISHIKI.—Deep rich crimson, mottled and blotched white, 3 standards same color.

KUMA-FUNJIN.—Purple overlaid with navy blue, 2 standards, very large orange blotches.

KUMO-NO-OBI.—Dark lavender purple, large handsome flower, 3 petals.

Single Varieties

YOMO-ZAKURA.—Light ground, densely veined and suffused purple.

O-YO-DO.—Dark violet.

ISO-NO-NAMI.—Silvery white, veined violet.

SHINOGO.—White.

YJINO.—Reddish purple, mottled and veined white.

PRICES

NAMED VARIETIES.
Each, 25c; doz., $2.50; 100, $15.50

MIXED, GOOD ASSORTMENT.
Each, 20c; doz., $2.00; 100, $11.00

German Iris

German Iris is one of the best of the early Spring flowers, is hardy everywhere, and if planted in a moist situation or watered freely, will produce maganificent orchid-like blooms of great size and delightful fragrance. Comes in charming color effects in **blues, browns, yellows, purples, white.**

CELESTE.—Satiny blue.

FLORENTINE ALBA.—White.

PALLIDA DALMATICA.—Extra large, lovely true lavender, delightful fragrance, free flowering, fine for massing or as a cut flower.

MADAME CHERAU.—Large white, dainty frilled blue edge.

MAORI KING.—Rich deep yellow.

SPECTABILIS.—Violet purple.

SHAKESPEARE.—Bronze violet.

MARS.—Light yellow and cream.

CHOICE ROOTS.—
Each, 20c; doz., $2.00; 100, $11.00

FOR SPANISH IRIS See Autumn Catalog.

HARDY FERNS—For Shady Borders and Rock Work

PRICES: Nice plants, 35c and 60c each. Trial Collection, $1.50, postpaid.

EVERGREEN WOODFERN.—(Dryopteris Marginalis)—Marginal shield fern; most valuable of the hardy evergreen ferns for garden.

QUEEN OF LADY FERNS.—(Asplenium Victoriae)—A vigorous rapid grower; one of the best of the "Lady Ferns."

NATIVE OREGON SWORD FERN.—Makes imposing specimens in borders or in tubs. Prefers partial shade.

HARTS TONGUE.—(Scolopendrium Vulgare)—Easy of cultivation; very distinct and attractive.

FIVE FINGERED LADY FERN.—(Adiantum Pedatum)—Most graceful and beautiful hardy maiden hair fern.

POLYSTICHUM VIVI QUARA.—A rare and wonderful fern of great beauty, the long, graceful fronds having a fine mossy coat, from which miniature ferns, exact counterparts of the parent plant, spring in great profusion and after getting well started can be removed and potted.

WE offer a splendid list of Ferns, including some of the newest varieties as well as the older sorts. All plants are in fine growing condition, and well rooted. Florists wishing stock of the new varieties write for prices.

Nephrolepis or Boston Ferns

Price small plants, 30c; from 4 in. pots, 75c; 5 in. $1.50, postpaid.
Specimen plants, $1.60 to $3.50 F. O. B. Spokane.

N. AMERPOHLII.—This charming "Lace Fern" is so finely "crested" as to have a fluffy lace-like appearance, and is the most beautiful and attractive "sport" from the Boston Fern; an ideal plant for house or table decoration.

BOSTON FERN.—This is the original and well known type of "Sword Fern."

N. ROOSEVELT.—Resembles Boston Fern, produces many more fronds, making a bushier and handsomer plant.

NEPH. TUBEROSA PLUMOSA.—Much hardier than other varieties of the Boston Fern. The pinnules are of light color, giving the long narrow fronds a beautiful effect on account of the two distinct shades. Splendid addition to fern collections.

SCOTT FERN. — (*Nephrolepis Scottii*) — Identical with the original Boston type, but is dwarfed with a more compact and bushy habit of growth.

OSTRICH PLUME FERN. — (*Nephrolepis Whitmani*).—One of the most wonderful and beautiful introductions of the present age; this new sort is a sport from the well known Boston Fern; has a beautiful feathery appearance, and is one of the grandest of decorative house plants.

TEDDY JUNIOR.—The new Dwarf Fern. A sport from the famous Roosevelt Fern, and while it retains all the valuable characteristics of the parent plant, the fronds are shorter. Is very compact in form, a vigorous and rapid grower, producing about four times as many fronds as any other fern ever introduced, making it a valuable table decoration or pedestal plant.

New and Popular Ferns

ASPARAGUS PLUMOSUS.—(Climbing Lace Fern). A finer and more delicate plant than the Sprengerii, but hardy and easily grown; the fronds retain their freshness for weeks when cut; fine for floral decorations.
Nice plants, each, 15c; large plants, 25c to 50c

ASPARAGUSSPRENGERII.—(Emerald Feather) Handsome and valuable evergreen trailing plant for the house or conservatory; its beautiful sprays of lovely green, feathery foliage can be cut freely.
Nice plants, each, 15c; large plants, 35c to 50c

BIRDS NEST (*Asplenium Nidus Avis*). A rare and beautiful fern with broad outer leaves; center curiously formed like a nest; color is deep green; an attractive pot plant for exhibition.
Specimens from 4-inch pots, $1.50, postpaid.

FOR FERN DISHES.—Attractive assortments, sufficient for 5 to 6-inch pans.
75c to $1.00, postpaid

MAIDEN HAIR.—(*Adiantum Croweanum*). This is the hardy Maiden Hair Fern so valuable to florists for cutting, grows freely under almost any condition inside; it is a sure grower.
Good plants from 4-inch pots, $1.00 postpaid

CYRTOMIUM ROCHFORDIANUM.—Foliage of a rich deep glossy green color; the leaflets besides being wavy, are also deeply cut or toothed; valuable for a dish fern and for decorative work.
Prices: Small plants, 25c; from 4-inch pots, 60c, postpaid.

Japanese Fern Balls

DIRECTIONS FOR STARTING.—Place ball in water for 15 minutes, and then suspend in any desired position, or place in a shallow dish; repeat every two days until growth is started, after which sprinkle occasionally as required. They need very little sun.
Price of Balls in dormant state, large size, each, 75c; small, 50c.

SPECIAL - Six Fine Table Ferns for $1.25

Price 25c each; 6 sorts for $1.25. Extra large plants, 50c each, postpaid.

ADIANTUM CUNEATUM.—Maiden Hair Fern. A very beautiful and graceful fern.

ASPIDIUM TAUSSIMENSE.—Without question the most valuable of all ferns yet introduced for fern dishes; of strong but dwarf and graceful habit.

BOSTON FERN.—See description above.

CYRTOMIUM FALCATUM.—(The Holly leaved fern). One of the most desirable; with hardy, dark green foliage.

PTERIS CRETICA ALBO-LINEATA.—A pretty and useful variegated variety, distinctly showing the clear white variegation.

OSTRICH PLUME.—See description above.

For HARDY FERNS Suitable for SHADY BORDERS and ROCK WORK See Our Special Collection on Page 121

Palms and Ornamental Plants

PALMS lend their surroundings an atmosphere of elegance and completeness, and with proper care will thrive in any home, making the most magnificent and useful decorative plants.

CARE OF PALMS.—Good garden loam, with a little sharp sand, is the best soil for palms, and good drainage is of first importance—do not keep a palm too wet. If you set the pot in a jardiniere put something under the pot to let the water drain through. Never let the water stand around the bottom of the pot. Water thoroughly, but let it drain off, then when the soil begins to look dry give another good wetting. It is important to keep the soil of any pot plant moist—clear through—but not wet like mud. One other important point: Soil must have light; palms and some plants would do well without strong light, but the soil would soon sour and fail to nourish them, therefore, when not actually in use keep them as near the windows as possible, but not in the hot sun.

Bone meal is the best fertilizer; a tablespoonful to a 7-inch pot is a good portion. Dig well into the soil. Apply when new growth shows. Do not repot as long as they are doing nicely. And when you do, transfer gently to the larger pot and fill the soil around the roots, disturbing them as little as possible. Palms do best in comparatively small pots. Shower them with water twice a week and should they show signs of scale, wash with strong soap and water or kerosene emulsion (a pound of soap melted with a half pint of kerosene thoroughly stirred into it). Dilute this with ten parts of water and apply with a cloth or brush.

Choice Palms for Table and House Decoration.

PHOENIX ROEBELENII.—A new and graceful miniature "Phoenix" fully equaling in beauty the Cocos Weddeliana, hardy as the Kentia. Of vigorous, bushy growth.
Choice plants, from 4-inch pots, 60c to $1.00

KENTIA BELMOREANA.—A beautiful, strong growing Palm with deep green, crisp foliage; inclined to dwarf and spreading habit; one of the most popular for house culture, as they are very hardy. **Small plants, 50c to 75c. Large plants, 18 inches up, $1.50 to $5.00 and up.**

RHAPIS HUMILIS.—Rare ornamental Palm with slender, graceful leaves; very handsome and attractive; an excellent decorative variety, requiring very little sun. **Each, $1.50 to $5.00 up.**

CHAMAEROPS EXCELSA.—(See cut No. 3.)—Leaves fan shaped, deeply cut; one of the hardiest Palms we have and worthy of extensive culture; very handsome palmate leaves. **Choice plants, 18 inches and up, each, $1.50 to $3.00.**

CYCAS REVOLUTA, SAGO PALM.—See cut No. 1.)—Valuable for lawn and house decorations; they have a thick trunk, and their heavy glossy, deep green pinnate leaves resist alike the gas, dust and cold to which decorative plants are frequently exposed; fine plants, 18 inches and up.
Each, $2.00 to $5.00 and up.

LIVISTONIA CHINENSIS.—(See cut No. 4.—A useful Palm for decorative work, for apartments or conservatories; leaves large, fan shaped, of a rich dark green color; graceful and quick growers, 12 to 18 inches. **Each, 75c to $1.00**

CHAMAEROPS FORTUNEI.—(See cut No. 2.)—A handsome Palm, similar to the above, more dwarf in growth and with smaller leaves. Choice plants, 18 inches up. **Each, $1.50 to $3.00**

COCOS WEDDELIANA.—The most graceful of all Palms; finely cut foliage of rich deep green; we have fine plants of this most desirable Palm, well established in 4-inch pots, 5 to 7 leaves.
Each, $1.00. Nice specimen plants, $2.50 up.

DRACAENAS

D. INDIVISA.—This is the popular hardy Dracaena that is used so extensively for centers of vases, baskets, boxes, etc. Of graceful form, and stands full exposure to sun.
4-inch pots, 35c; 5-inch pots, each, $1.00

D. GRACILIS.—Graceful foliage; plant having a red stripe on slender green leaf; smaller grower than D. Indivisa. **Each, 50c to $1.00**

UMBRELLA PLANT

CYPERUS.—(Alternifolia.) A splendid house plant of easy culture; resembles a palm; requires little or no attention, and remains green throughout the year. Keep well watered.
Small plants, postpaid, each, 20c to 30c. Large plants, by express, each, 40c to $1.00.

PANDANUS VEITCHII

Graceful foliage plant; broadly striped cream on green ground; one of the finest decorative house plants. **Each, $1.00 and $1.50**

ASPIDISTRA

Ornamental foliage, plant throwing up shoots which unfold, developing into long, graceful leaves; color a beautiful dark glossy green; give same treatment as hardy palm.
VARIEGATED.—Rich, creamy markings, **$1.50 up**

RUBBER PLANT

FICUS ELASTICA.—This is certainly one of the best plants grown for decorative purposes; it succeeds well with ordinary treatment.
Large plants, each, $1.00 to $1.50 up

"DIAMOND PLANT FOOD" for Palms and Pot Plants. **½ lb. Pkg., 15c; 1 lb., 25c. Postage extra.**

GERANIUMS

GERANIUMS are undoubtedly the most popular bedding plant of the time. Their free rapid growth and continuous blooming qualities keep them in the front rank among the long list of bedding plants. Beds of one color or variety have been very popular of late years, being very effective in all garden efforts, and for winter flowers inside nothing is more satisfactory. They are of the easiest culture, requiring to be kept cool and given plenty of air, with an occasional sprinkling of the foliage to clean and freshen it. Keep the roots moist, not too wet, and have good drainage in the pots. No other flower can take their place as a bed or border plant, and inside they grow beautifully throughout the year, making cheery house plants.

Standard varieties for bedding—large plants $1.00 to $3.00 per Doz.

Our list of varieties include a number of rarely beautiful novelties as well as the very best standard sorts, and prices are so low as to place them within reach of everyone.

Seven Rare Novelties--Single Geraniums

Price 25 cents each. Set of 7 sorts $1.25.

CARDINAL MATHIEN.—Immense trusses of bright salmon-colored flowers, upper petals shaded pale rose.

GENERAL GALLIENI.—Rich crimson, shaded to bright purple; large white eye bordered with red. Very distinct and beautiful.

HELEN, COUNTESS OF RADNOR.—Very large, round petaled, of an attractive shade of warm rosy cerise. A grand novelty.

JEAN ROSTAND.—Brilliant vermillion-scarlet with large white center reticulated with blue veins. Strong growing and free blooming.

MELODIA.—Fine trusses of a brilliant rosy-magenta color, shaded to white in the center. Immense round flowers, a grand novelty.

MME. RENARD.—Profuse bearer of beautiful rose-colored flowers in very large trusses. A grand new bedding sort.

ROMILDA VICINI.—White ground overlaid with light rosy-salmon with a reticulated effect; upper petals feathered with crimson. Very novel colorings.

Twelve Fine Single Geraniums

Price, 15c each. Set of 12 sorts, $1.50; postpaid, $1.60.

ALBION.—Beautiful free flowering white variety as pure as driven snow. Always in bloom.

BELLEROPHON.—One of the freest blooming single scarlet bedding varieties; rich, glowing scarlet, crimson maroon shading on upper petals.

EUGENE SUE.—Odd shade of russet orange, very distinct.

HALL CAINE.—Very large round florets in numerous umbels. Light rich scarlet.

JACQUERIE.—Rich, vivid crimson, immense trusses.

MAXINE KAVOLENSKI.—Odd shade of orange red; very distinctive, splendid bedder, vigorous, handsome; a dependable sort.

METEOR.—Brilliant crimson maroon. A magnificent bedding variety.

MILDRED RIVAL.—Pure rose pink, with conspicuous white blotch on two upper petals.

MRS. A. BLANC.—Light salmon, blended with darker shades; center and edge of petals pure white; extra fine.

MRS. E. G. HILL.—Very large trusses of single florets; color clear salmon, with a white center.

NUIT POITEVINE.—Trusses and florets of grand size; rich, rosy violet; the upper petals feathered with scarlet at their base. Very distinct and much admired.

VICTOR GROSSETT.—Rich apricot bordered on vermilion; profuse bloomer and excellent habit. A splendid bedding sort.

Seven Rare Novelties—Double Geraniums

Price 25 cents each. Set of 7 sorts $1.25.

CURIOSA.—Large trusses of flowers of a delicate rosy-mauve color spotted with pink; large white eye. A fine, healthy grower.

ERNEST HERBERT.—Enormous trusses of rosy-white flowers veined salmon toward the center. One of the most distinct new sorts.

FIAT.—Rich orange-salmon color, tinted with copper; one of the prettiest colored novelties which has come to our notice.

HENRY BONNELL.—Deep ruby-violet, distinctly splashed with white. Superb trusses, freely produced. The coloring is remarkable.

PRESIDENT NEUMAN.—Immense trusses of clear orange-scarlet flowers produced in great profusion. A promising bedding variety.

REGALIS.—Very large trusses of rich carmine-colored flowers. Handsomely zoned foliage; fine healthy growing novelty.

VIRGINIA. — Delicate daybreak-pink shaded painted-rose with large white center. Large trusses on strong stalks. Very beautiful.

Twelve Fine Double Geraniums

Price, 15c each. Set of 12 sorts, $1.50; postpaid, $1.60.

ALPHONSE RICARD.—Immense trusses of large round flowers of the most vivid scarlet.

BEAUTE POITEVINE.—Very large, semi-double flowers of a brilliant salmon color. One of our best sorts.

CONTRASTE.—Glowing carmine, shaded darker; one of our best bedders.

FRANCIS PERKINS.—The finest pure pink variety we know of.

GOLDEN DAWN.—Color brilliant orange with brighter shadings; the nearest approach to yellow.

JEAN VIAND.—Soft rose color, shaded to white. Magnificent bedder.

MADAME LANDRY.—Distinct salmon pink Lightly shaded scarlet. Magnificent trusses.

MME. RECAMIER.—Snow white; strong, vigorous grower; flowers abundantly produced in large trusses.

MRS. LAWRENCE.—Beautiful satiny pink shaded to white; a gem among geraniums.

ORNELLA.—Intense bright scarlet. A grand bedding variety.

S. A. NUTT.—The best of the rich, dark crimson varieties; trusses massive.

SUZANNE DESPREZ.—Snow white, distinctly bordered with pink. Very striking.

Ivy Leaved or Trailing Geraniums

These are unexcelled as basket or window-box plants, as well as being useful in bedding covering the ground quickly with their deep green, ivy-shaped leaves and brilliant colored flowers.

Price 20 cents each. Set of 6 sorts $1.00.

BALLADE.—Large double flowers of a tender lilac color, feathered with crimson.

BETTINA.—Clear light pink blotched with maroon. Robust close-jointed habit.

CHARLES TURNER.—Brilliant pink, approaching scarlet. Upper petals nicely feathered maroon. Large trusses. Best of all ivy geraniums.

GARDEN GLORY.—Brilliant scarlet, upper petals veined crimson; rich and attractive.

MRS. HAWLEY.—Soft rose-pink of silvery appearance. A beautiful variety.

COLONEL BADEN POWELL.—The nearest approach to a pure white variety in this class of geraniums. Fine large trusses.

Pelargoniums—Lady Washington Geraniums

Price 25 cents each. Set of 6 sorts $1.25.

CRIMSON KING.—Rich crimson blotched and feathered maroon. A superb dark colored variety.

DOCTOR ANDRE.—Elegant fringed flowers of delicate light pink feathered and blotched maroon.

EASTER GREETING.—Beautiful new variety, remarkable for its free blooming proclivities, being equally as fine bedded out as it is grown as a pot plant. The flowers are of a fiery amaranth red, each petal distinctly blotched maroon. A novelty of the greatest merit.

COUNTESS.—Very large flowers of distinct shade of rosy-cerise, upper petals marked with crimson.

MABEL.—Immense florets of round form and great substance. Color pure rose pink, heavily blotched and feathered chocolate-maroon. One of the best varieties.

MADAME VIBERT.—Flowers bright red blotched with black and maroon and edged with pink and white.

MADAME THIBAUT.—Rosy-pink marbled with strawberry and carmine and edged pure white.

Six Beautiful Flowering Begonias

Price, 15c each; set of 6 sorts, 60c, postpaid.

ALBA PICTA.—A strong growing variety, with pointed dark green leaves; profusely covered with pure white spots. Pretty white flowers.

ARGENTEA GUTTATA.—Handsome erect growing sort, with pointed wine-colored leaves with silvery white spots; clusters of pure white flowers on the tips of the stems.

CUPREA.—A fine, erect Begonia, with dark, rough leaves. The panicles of unopened flowers are bright red with surfaces like plush.

FOLIOSA.—The freest-flowering Begonia we have. Makes a handsome window plant, with its glossy green leaves and bright pink flowers.

MARGUERITE.—Bronzy green, with purple cast; large trusses of cream and rose-colored flowers.

MARJORIE DAW.—Strong growing sort with glossy green leaves, producing large panicles of bright salmon pink flowers drooping gracefully about the plant.

Rex Begonia

Grown for the beauty of their foliage. The leaves are large, variegated and margined with a peculiar silver-metallic gloss. The most ornamental of window plants; also useful in baskets and vases. We offer twenty of the most distinct and handsomely marked varieties.

Price, choice plants, each 30c

Rex Begonia

DIAMOND PLANT FOOD—½ lb. 15c, 1 lb. 25c—*A one pound package will feed a dozen Pot Plants* A WHOLE YEAR

Choice Novelties in Carnations

CARNATIONS will thrive in any good fresh garden soil. After danger of frost is over, set 10 to 12 inches apart each way, cultivate and water as needed until they begin blooming, then mulch with light manure that has straw in it; plants should be staked or strung to support them. Carnations are easily grown in the house for Winter flowers. **Price 25c each. Set of 7 sorts, $1.25**

"American Carnation Culture" Lamborn $2.00 Postpaid.

ALICE.—Very large light pink flowers on strong stems; heavily fringed and strongly fragrant. A rare acquisition to our list of everblooming carnations.

CHAMPION.—Large bright scarlet flowers on long wiry stems. A grand garden variety, produced by a well known hybridist in Indiana.

GORGEOUS.—Luxuriant growing new carnation of giant proportions. Very long straight stems surmounted by large, finely fringed flowers of deep carmine, shaded to rich velvety scarlet. A giant among carnations.

MATCHLESS.—A wonderful new white variety produced by a famous hybridizer of New York State. Large massive flowers on strong upright stems. Sweetly perfumed.

PRINCESS DAGMAR.—A grand new everblooming carnation, producing very large flowers of a rich crimson maroon color. Its rich, velvety color is immensely popular.

PINK SENSATION.—Very large, heavily fringed flowers with exquisite fragrance. Color pure rose-pink with silvery shadings. Rank growing variety with long straight stems and leathery blue-green foliage. A superb new American seedling.

YELLOWSTONE.—Vigorous growing, free flowering new variety producing flowers of a dainty canary yellow lightly splashed and mottled with pink. A gem among fancy carnations.

Standard Everblooming Carnations

Price: 20c each; 4 for 60c; set of 12 fine varieties, $1.50, postpaid.

BEACON.—A bright, deep scarlet; a most perfect color, soft yet brilliant; the flower is of the largest size and perfectly double; nicely fringed; sweet.

BONORA.—A beauty; fancy variety of fine size and form, borne on long, stout stems. Color white flaked and splashed with red.

ELDORADO.—Deep golden yellow, splashed and striped with red; a very rich combination of colors and a novely of much merit.

ENCHANTRESS.—Flowers very large, borne on long stems. The color is a superb shade of flesh pink. An early and continuous bloomer.

HERALD.—Flowers very large and massive with finely fringed petals and strong calyx. Stems long and very stout; color bright rich scarlet. A true everbloomer.

LADY BOUNTIFUL.—Pearly white flowers, produced on strong wiry stems. Nicely fringed and very fragrant.

MAY DAY.—This Carnation has that exquisite shade of pink so greatly in demand. Form. size and calyx grand.

MRS. C. W. WARD.—Simply superb, both in form and color; brilliant dark pink, of immense size.

PHILADELPHIA.—Greatly admired for its beautiful soft rose pink flowers. Very delicate and pretty.

POCAHONTAS.—Rich crimson-maroon flowers of fine size and build. A rarely beautiful variety.

WHITE ENCHANTRESS.—A pure white sport from the famous variety Enchantress, having the same general habit and characteristics. A superb flower.

VICTORY.—Intense scarlet of great brilliancy. Strong stout stems, holding the flower upright. One of the best sorts of its color.

Free Blooming Fuchsias

Price, 15c each; set of 6 sorts, 75c.

ANNA EARLE.—Tube and sepals waxy white; corolla single, clear carmine; plants splendid and free blooming.

DR. BROOKS.—Rich, dark blue corolla, with crimson petals. A beautiful variety.

MOLESWORTH.—Fine, large and elegant form, sepals long and reflexed, pure red; corolla large double white.

GENERAL ROBERTS.—Flowers very large; corolla plum color; tube and sepals crimson.

JUPITER.—This is a grand mammoth double flowered Fuchsia; flowers of enormous size, very large, rich purple violet corolla; tube and sepals bright crimson.

SNOWSTORM.—The freest flowering double white variety.

KILMOL The U. S. Gov't Mole and Gopher Exterminator is the only sure and inexpensive way to rid your lawns and gardens of these troublesome, destructive pests.

Finest New Japanese Chrysanthemums

Price 20 cents each. Set of 10 sorts $1.50.

ANTIQUE.—Immense incurved globes of deep terra cotta and bronze. Entirely distinct from all other kinds.

AESTHETIC.—Puffs of loosely arranged petals incurving in the most artistic way. Very large and beautiful. Color, a light primrose yellow.

CHIEFTAIN.—Very large and perfectly incurved flowers of a beautiful silvery-pink color. The most promising new variety of this color we have been able to offer in several seasons.

ELSIE PAPWORTH.—Large full flowers with petals interlacing in elegant manner. Color, pure snowy white.

ELBERON.—Very large incurved flowers of perfect globe shape. Color, rosy pink tinted with silver. One of the largest chrysanthemums we know of.

IDEAL.—Large incurved flowers, perfect in form. Color, pure white. A fine commercial variety.

J. LOCK.—Strong vigorous growing and free blooming; long wide petals loosely arranged into an immense reflexed bloom. Color, bright yellow.

LA AFRICANE.—Large finely formed flowers of a rich crimson maroon, reverse of petals shaded golden bronze. A grand new dark colored sort.

GLACIER.—As its name indicates the color is a glistening snow-white. Petals wax-like, closely incurving into the most perfectly formed flower ever seen.

MANHATTAN.—Mammoth flowers with long wide petals of heavy texture. Color, soft shell pink of the most delicate shade.

OCONTO.—This fine white variety is going to become very popular. Large globe-like flowers on strong stems.

NAKOTA.—Immense blooms of a rich orange-buff color so distinct as to attract the notice of all who see it. One of the finest sorts for the exhibition table.

Twelve Finest Exhibition Chrysanthemums

Price, 15c each; set of 12 sorts, $1.20. Postpaid.

CHRYSOLORA.—In our field trials during the past season this variety stood out pre-eminently as the finest yellow in the collection. Large, incurved flowers of elegant form.

CHARLES RASER.—Elegant, snow-white, incurved blooms of fine size and build. Comes on long, stout stems grandly clothed with luxuriant foliage. One of the finest new sorts.

C. H. TOTTY.—Large, fluffy flowers of a glowing chestnut scarlet; reverse of petals shaded gold. This grand sort impresses us as being the very finest red variety to date. Simply superb.

CLEMENTINE TOUSET.—Creamy white, delicately laced with lilac and lavender; petals beautifully twisted and arranged. Fine large flower.

COLONEL APPLETON.—Rich, golden yellow, immense size, very double; a grand, well-built flower, with splendid stem and foliage. A sure prize-winner.

DR. ENGUHARD.—Flowers delicate pearl-pink; large, beautifully incurved; very double and of exquisite form.

MAJOR BONNAFFON.—Soft, clear yellow, full in the center, eight inches in diameter and nearly as deep; perfect form.

MATCHLESS.—Largest and most beautiful dark crimson scarlet yet raised; looks like crimson velvet; the color long desired. Superb in the garden.

PIONEER.—Color a beautiful shade of Enchantress, or flesh pink. Perfectly incurved flowers of remarkable waxy appearance. Sturdy grower with handsome, leathery foliage. A fine thing.

POLYPHENE.—A gem in every sense of the word; magnificent in size, form and color. Its informal character of build and rich canary yellow color need only to be seen to be appreciated.

ROMAN GOLD.—In this fine variety we have secured a sort which for richness of color excels all other yellow varieties to date. Comes shaded with bronze in cool weather.

TIMOTHY EATON.—The largest globular Japanese incurved variety yet raised. Form round and perfect; color, creamy white; growth, vigorous, with large, dark green foliage.

"DIAMOND QUALITY" PLANTS AND ROSES

May 5, 1915

Gentlemen:—I received my premiums all O. K. Many thanks for same. I never received nicer plants from any firm. Chrysanthemums are all growing fine. Never even wilted a little bit. They were all very nice big plants. *Mrs. S. J. Freese*

January 17, 1915

Gentlemen:—I wish to thank you for the excellent rose bushes you sent me last Spring. They did splendidly and I won the first prize on the Lady Hillingdon as being the best rose in the show, in our flower show held here last Fall. *Rupert H. Ilton*

D' Aste, Montana

Gentlemen:—My small order of plants received and you certainly do send out fine stock if my order is a sample. *Mrs. Bertha Bierman*

Gentlemen:—I received the two Palms, Phoenix Roebelenii by express today and please accept my thanks for sending me such fine large specimems. *Mrs. H. B. Sibley*

PAEONY DAHLIAS are best for garden effects. They also have long stems and keep well when cut.

SEE PAGE 112

Paeonies

Double Herbaceous

THE development and increase in popularity of the Paeony has been unparalleled among flowers, and the profusion and duration of bloom, combined with handsome, massive foliage, accommodating habit, and easy culture, render them one of the most popular hardy plants grown for lawn and garden decoration.

Paeonies are always free from disease and insects do not bother them. They are hardy, thrifty growers, bloom freely, and nothing will add more to the beauty and attractiveness of the lawn.

Hardy Phlox

One of the most beautiful and satisfactory perennials. We offer a superb collection.

SEE PAGE 116.

FESTIVA MAXIMA.—This superb variety is easily the most popular and valuable Paeony. Its flowers, of rare beauty and great size, are perfectly double, pure white tipped or flaked with a small crimson spot at center; petals fine as summer silk; finest white in cultivation; strong roots. **Each 75c; large specimen plants, $2.00**

DELICATISSIMA.—Light rosy apricot, sometimes margined carmine red. **Each, 40c**

COURONNE D'OR.—A superb white flower of immense size, reflects yellow, center petals bordered carmine, a perfect flower of great beauty, very fragrant, free blooming and vigorous; late. **Each, 75c**

POTTSI-ROSEA.—Rich deep rose, lighter center. **Each, 40c**

MAD. DE VERNEVILLE.—Broad outside petals, sulphur white, with center rosy white, sometimes edged carmine, and beautifully imbricated; an exceptionally fine full flower, with the sweet fragrance of the rose. One of the earliest. **Each, 50c**

MAD. BREON.—A beautiful variety with good growing qualities; flowers outside flesh, center lemon, occasionally carmine tipped when first open; entire flower gradually changing to pure white. **Each, 60c**

DELACHEI.—Large, full flower of a deep rich crimson, purplish tone; a free blooming thrifty grower, very fragrant; medium to late. **Each, 35c**

OFFICINALIS RUBRA.—Flowers of a bright scarlet crimson; quite double and globular; very early, rare and fine. **Each, 30c**

OFFICINALIS ALBA.—Blooms with Officinalis Rubra; flowers large and handsome. When Alba first opens it is light pink, fading to white as flowers get older. **Each, 30c**

OFFICINALIS ROSEA.—Beautiful bright pink globular flowers, blooms with Officinalis Alba and Rubra. These splendid early bloomers produce fine flowers for Decoration Day. **Each, 30c**

FRAGRANS.—Late; color deep rose; fragrant and a very prolific bloomer; tall grower. **Each, 40c**

QUEENS PERFECTION.—One of the finest of the creamy flesh whites, large, full and attractive. **Each, 40c**

Paeony Moutan

(Tree Paeony)

Grows about four feet high, forming a small tree-shaped shrub. When this plant becomes well established and is covered with dozens of massive blooms it presents a magnificent display. We have **Crimson, Pink, Scarlet, Rose and Variegated.**

STRONG IMPORTED ROOTS, from January to May, by express at buyer's expense (too heavy to mail). **Each, 75c**

Flavoring and Medicinal Herbs—Plants

CHIVE.—Has mild onion flavor, grows in grass-like clumps; much used for flavoring. **Each, 15c; doz., $1.50**

LAVENDER.—By distillation produces the well-known Lavender water, the flowers for perfuming wardrobes, etc. **Each, 25c; doz., $2.50**

ROSEMARY.—Infusions of the leaves are used in medicinal beverages. Produces an aromatic oil. **Each, 25c; doz., $2.50**

THYME.—Broad leaved, used in soup, stuffing and sauce. **Each, 25c; doz., $2.50**

SWEET MARJORAM.—The sweet aromatic leaves are used in either the green or dry state. **Each, 20c; doz., $2.00**

SAGE (Giant).—The leaves and tender tops are used in stuffings and sauce; also in the beverage known as Sage Tea. The Giant or Mammoth Sage is a greatly improved variety more vigorous and having much larger leaves. **Each, 15c; doz., $1.50**

Vegetable Plants

WE grow large quantities of vegetable plants, and can supply all the kinds listed below, in their proper season, in most any quantity. We have made arrangements this year so that we can supply all vegetable plants in two grades. If you want a quantity of plants write us early.

Transplanted plants are much stronger and better rooted, and are well worth the price, especially in the early part of the season. We can supply most any of the leading sorts. No plants sent C. O. D.

RHUBARB

Photo of Plants—First year after setting

NEW RIVERSIDE GIANT

RIVERSIDE GIANT is the famous private stock of Mr. A. R. Cummings, of Canby, Oregon, that has been the leader in the Portland market; and the plants are now offered for sale for the first time, as heretofore, Mr. Cummings has used all the plants that could be propagated for his own setting.

A cross between the California Wine Plant and Victoria Mammoth, this giant variety is unequalled for yield and quality, being crisp, tender, free from stringiness, with a good color and a delicious distinctive flavor. The skin is so thin that it disappears in cooking. Riverside Giant has every good quality of a commercial rhubarb and is so vigorous and productive that over 35 tons per acre is a conservative estimate for the season. Cuttings begin in March and usually four are made if irrigated—the last one in July. Four men in six hours have cut over 5 tons from less than one-half acre on the fourth cutting.

We have the exclusive sale of this wonderful rhubarb and offer root divisions only—from the original stock—every root will make a thrifty plant if properly cared for.

Prices: 25c each; $2.50 per doz.; $20.00 per 100; $175.00 per 1,000, f. o. b. Spokane.

Write for prices on large orders

	Postpaid Dozen	By express 100	By express 1000
CABBAGE--			
Early or late kinds, transplanted	**$0.20**	**$0.75**	**$6.00**
Not transplanted		**.50**	**4.00**

Add 15c per 100 for Cabbage Plants by mail.

	Postpaid Dozen	By express 100	By express 1000
CAULIFLOWER--			
Early Snowball, transplanted	**$0.30**	**$1.25**	**$8.00**
Not transplanted		**1.00**	**7.00**
Late kinds, transplanted	**.30**	**1.00**	**7.00**
Late kinds, not transplanted		**.75**	**6.00**

Add 15c per 100 for Cauliflower Plants by mail.

	Postpaid Dozen	By express 100	By express 1000
CELERY--			
Leading kinds, transplanted	**$0.30**	**$1.00**	**$7.00**
Not transplanted		**.50**	**5.00**

	Postpaid Dozen	By express 100	By express 1000
TOMATOES--			
Leading kinds, transplanted	**$0.30**	**$1.00**	**$7.00**
Not transplanted		**.75**	**6.00**

Add 25c per 100 for Tomato Plants by mail.

CHIVES (Schnittlauch), per bunch.....**25c**

Hop Vines

ENGLISH CLUSTER—The best sort.

Strong roots, postpaid, 5c each; 35c per dozen. By express, 25c per dozen; $1.50 per 100.

Write for prices if wanted by the 1000.

Horse Radish

Postpaid, 5c each; 35c per dozen. By express or freight, 25c per dozen; $1.50 per 100. Write for prices by the 1000.

Asparagus

ONE-YEAR-OLD PLANTS--Postpaid, 25c doz., 75c per 50; $1.00 per 100; by express or freight 20c dozen; 50c per 50; 75c per 100; $6.00 per 1000.

TWO-YEAR-OLD PLANTS--Postpaid, 40c per dozen; $1.00 per 50; $1.50 per 100; by express or freight, 25c dozen; 75c per 50; $1.00 per 100; $8.00 per 1000.

Rhubarb, or Pie Plant

VICTORIA MAMMOTH--STANDARD HARDY VARIETY

ONE-YEAR-OLD ROOTS--Postpaid, 8c each; 75c per dozen. By express or freight, 50c per dozen; $3.00 per 100.

TWO-YEAR-OLD ROOTS--Postpaid, 15c each; $1.25 per dozen. By express or freight, 85c per dozen; $6.00 per 100.

If wanted in larger quantities write for special prices.

BURBANK CRIMSON WINTER RHUBARB

A widely-advertised, forcing variety of great value, the flavor and quality being superior to any other rhubarb. Comes on very early and lasts through a long season, hardy in some sections, but gives best results when protected. Must be propagated from root divisions, as it does not come true from seed. **Large clumps, each, $1.00; doz., $10.00. Divided roots, each, 25c; doz., $2.50, postpaid.**

PLANT a Half Dozen **RIVERSIDE GIANT RHUBARB** in your Home Garden, and have the earliest, finest flavored, best quality Rhubarb that you ever saw or tasted. Makes the most delicious and wholesome sauce and pies. **Take our word for it.**

STRAWBERRY PLANTS

"DIAMOND Quality" Strawberry Plants are large, vigorous and healthy. They are heavily rooted and have large, full crowns; have been carefully grown, and are free from disease and pests. We dig as ordered and pack for shipment in ventilated crates of 500 plants each. **They are grown from our select strains and are always true to name; no substitution** is ever allowed without instructions from the purchaser.

Our select strains of **New Oregon, Gold Dollar, Marshall, Magoon, Clark's Seedling** and other Western varieties, many of which were introduced by ourselves, still hold their position as the **leading commercial varieties of the Northwest,** and are being planted more extensively each season. Thus demonstrating by actual market and growing tests the great superiority of our Western varieties, against the keenest competition from all sections.

Big Healthy Well Grown Plants.

Ask for Free Book, "Strawberry Culture."

Care For and Feed Your Plants

Neglect is the prime factor in strawberry failures, and most strawberry beds suffer from lack of attention and starvation. Proper fertilization and intelligent culture insure enormous crops of finest fruit and freedom from diseases and pests. White grubs, cutworms, crown miners, etc., can all be controlled by preventive measures. Never set strawberries in or near clover sod or hay fields. Such ground should have at least two years cultivation before using for strawberries. Remove the mulch directly after fruiting. This helps to control many evils. For helpful details of care and culture, see our **Strawberry Booklet, 32 pages, sent free on request.**

NEW OREGON

Our Own Introduction

Best, Most Uniform and Heaviest Yielding Main Crop Strawberry

"NEW OREGON" is large, firm and of fine form, averaging 15 to the quart box, color a brilliant, deep, rich red, having a glossy varnished appearance when fully ripe. This dark blood red coloring extends through to the very center, and, no matter how large, **"NEW OREGON"** is never hollow. When fully ripe the distinctive flavor is suggestive of the wild berry, is crisp and delicious, and will remain on the vine for three days without injury, keeping perfectly for many days after picking; stands handling and long shipments and will hold its color, shape and flavor when canned.

"NEW OREGON" is an early and continuous bearer, being ready for marketing the first half of May in the Willamette Valley and holds up in size and quality throughout the season, which in some localities extends until frost.

☛ The strawberries here offered have all stood the market test and you will be safe in selecting any one of them that will suit your conditions and requirements. They are the best varieties obtainable

STRAWBERRY PLANTS—Continued

NEW FALL BEARING
Strawberry
"PROGRESSIVE"
Photo ¾ size of fruit
4 months from planting.

PROGRESSIVE is the best of all late or Fall-bearing Strawberries that have come to our attention. The berries are shapely, of a rich red color, firm, and of delicious flavor; good keepers and shippers. Mr. Robson, of Canby, reports "from one-half acre, part set last Spring and part in the Fall, 42 crates had been picked up to the middle of October and bushels of fine berries lost from want of picking."

Progressive will bear as early as most varieties, but blossoms should be cut back until about four weeks before the berries are wanted, as many as 13 flower stems have been cut from plants set 4 months and in ten days they would be in full bloom again. Progressive is well worthy a trial.

Prices: Postpaid, Dozen, 40c; 25, 60c; 100, $1.75; by Express or Freight, 250, $3.00; 1,000, $11.00

Gold Dollar—Extra Early

No early strawberry we have ever known equals our special strain of "Gold Dollars."

Gold Dollar berries are large size, dark red all through, and have fine flavor. Foliage heavy, large and spreading, which protects the blooms from early frosts. Has a perfect bloom, and strong stems that hold the berries up from the ground, which helps to keep color and flavor during the early rainy season.

Gold Dollar Strawberries are the standard early berry in the big markets of the Northwest, and are always in demand. They are sure, heavy croppers, keep up their size throughout the season, and command the highest prices. They are the handsomest, most prolific strawberry.

Magoon

Originated near Portland; berry large, fine and of excellent sub-acid flavor; bears heavily throughout the season; especially adapted to Western Oregon and Washington.

Clark's Seedling

The berry that has made Hood River famous; best shipper, berries large, firm and of delicious flavor; vines bear large crops; is especially adapted to dry soil.

Wilson

An old standard variety; a heavy bearer of fine, moderate-sized berries; sharp acid flavor and the leading sort for canning.

Marshall

One of the best all-round strawberries; very large; dark crimson throughout; fine flavor; a fine market and table berry. Our stock of Marshalls is absolutely true and a vigorous and prolific strain.

Molinda

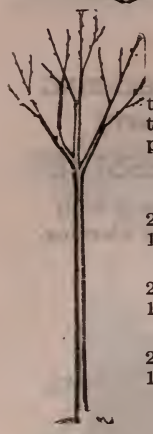
A large, firm berry of finest quality and rich coloring; firm and a good keeper. A variety very popular with California market growers, as it bears heavily through many seasons.

Price List of Plants

	By mail, postpaid		By express or freight packed in ventilated crates. F. O. B. Spokane.	
	Dozen	100	100	1000
Clark's Seedling	$0.30	$1.00	$0.60	$5.00
Gold Dollar	.30	1.00	.60	5.00
Magoon	.30	1.00	.60	5.00
Marshall	.30	1.00	.60	5.00
Molinda	.30	1.00	.75	5.50
NEW OREGON—IMPROVED	.30	1.00	.75	5.50
Progressive	.40	1.75	1.35	11.00
Wilson	.30	1.00	.60	5.00

Not less than 500 plants of a kind at 1000 rate. Special prices on 3000 or more.

FREE ON REQUEST, OUR 32-PAGE BOOK ON STRAWBERRY CULTURE Complete and up-to-date. **Things you should know about Strawberries.** **FREE**



Fruit Trees and Bushes

Our large 66-page Nursery Catalog contains a complete list with full description and illustrations of Fruit, Shade and Ornamental Trees, Shrubs, Climbers, etc. We would be pleased to mail a copy to anyone interested. We give below and on the following page a condensed price list. We can supply all reliable and standard sorts.

Apples

	Each	Per 10
2 years	$0.25	$2.00
1 year, 4 to 6 feet	.20	1.75

Apricots

2 years	.30	2.75
1 year, 4 to 6 feet	.25	2.25

Cherries

2 years	.50	4.00
1 year, 4 to 6 feet	.40	3.50

Pears

	Each	Per 10
2 years	$0.35	$3.00
1 year, 4 to 6 feet	.25	2.00

Peaches

1 year, 4 to 6 feet, branched	.20	1.75

Quince

2 years	.50	4.00

Currants

2 years	.15	1.25
1 year	.10	.75
Extra large, selected bushes	.25	....

Grapes

	Each	10	100
2 years	$0.15	$1.25	$10.00
1 year	.12	1.00	8.00

Crab Apples

	Each	Per 10
2 year trees	$0.25	$2.25

Plums

2 years	.25	2.00
1 year, 4 to 6 feet	.20	1.75

Prunes

2 years	.20	1.80
1 year, 4 to 6 feet	.15	1.35

Raspberries—Red

	Each	Per 10	Per 100
Best Red Sorts, 2 year	$0.08	$0.75	$4.00

Raspberries—Black Cap

	Each	Per 10	Per 100
Choice well-rooted plants	$0.10	$0.90	$6.00

Low prices by the thousand.

Gooseberries

	Each	Per 10	Per 100
2 years	$0.12	$1.00	$8.00
1 year	.10	.80	6.00

Blackberries

	Each	Per 10	Per 100
Standard sorts	$0.08	$0.60	$5.00
Oregon Evergreen	.12	1.00	7.50

Specialties in Berries for Market or Garden

LOGAN BERRY.--(Raspberry-Blackberry).—Prices: Two-year-old, 15c each, $1.50 per doz., postpaid; by express or freight, $1.25 per doz.; $7.50 per 100.

One-year-old (tips), 15c each; per 12, $1.25, postpaid; by express or freight, $1.00 per doz.; $6.00 per 100. Low prices by the 1000.

Grown Near, Salem.

BURBANK'S PHENOMENAL.--Prices: Two-year-old, 15c each; $1.50 per doz., postpaid; by express or freight, $1.25 per doz., $7.50 per 100.

DEWBERRY, LUCRETIA.--Price: Each, 15c; per 10, $1.25, postpaid; by express or freight, 75c per 10; $5.00 per 100.

HIMALAYA GIANT.--Each, 20c; dozen, $2.00, postpaid. Freight or express, each, 15c; doz., $1.50; 100, $9.00.

NEW MAMMOTH.--Prices: Two years old, each, 15c; doz., postpaid, $1.50; by express or freight, $1.25 per doz.; 100, $7.50.

THE IMPROVED SUPERLATIVE RASPBERRY.--Price: Each, 15c; doz., $1.40, postpaid; freight or express, doz., $1.00; 100, $9.00.

"CONRATH".--Early Black Cap--Choice, well rooted plants, each, 15c; 10, $1.25, postpaid. Freight or express, 10, 90c; 100, $6.00.

For description of these berries and a complete list of Fruits and Berries for the Northwest, see our 64-page Nursery Catalog.

Sweet Potato Plants

You can grow sweet potatoes easily if you plant the right varieties and set them out after the ground is warm. Rich sandy bottom land is best, but any good garden soil will give good returns.

We have always depended on the South for plants, but this year we offer

Oregon grown plants for seasonable delivery, per doz., 30c; 100, $1.15, postpaid.

F. O. B. Spokane, doz., 25c; 100, $1.00; 1000, $8.00.

"DIAMOND QUALITY" BEE SUPPLIES FOR WESTERN BEE KEEPERS

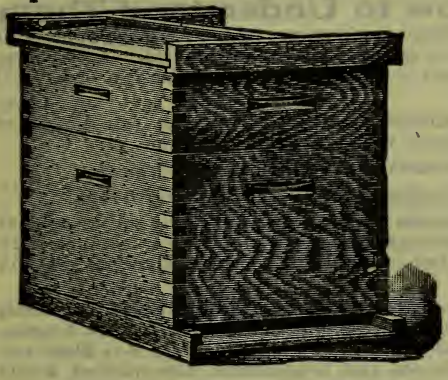
WE ARE THE PIONEERS in the Bee Supply business in the Northwest, are thoroughly familiar with local conditions and requirements, and if you are new to the business or the country we can be of much help in saving you any unnecessary outlay, work or loss of time and can start you on the right road to success.

STOCKS ARE LARGE and complete and we can fill any size order on short notice and will give the small order just as careful attention as the larger one.

THE A. I. ROOT CO.'S HIVES AND SUPPLIES well-known the world over as the standard of excellence are always on hand for prompt delivery at lower prices than you can purchase them for direct, as we are agents for the Root Company and give our customers the advantage of car rates.

WESTERN PINE AND CEDAR HIVES made to our order in standard sizes and designs; of first-class material and workmanship, are very popular with local bee keepers. Our Western lumber is satisfactory and lasting and we recommend them as being economical and serviceable.

Spokane Seed Co.'s Western Cedar Hives



These cedar hives are made especially for our Western trade. In construction they are the same as our pine hives, the only difference being that they are made of a superior quality of cedar, the best and most lasting wood for our Western climate. The sections and separators used in the supers are the regular No. 1 Eastern stock. Price and quality considered, these hives are splendid bargains.

PRICES	Each Nailed	K. D. 5	Packed Weight 10	of 10
Fig. 1-8	**$2.45**	**$11.00**	**$21.50**	**275**
Fig. 2-8	**2.20**	**10.00**	**19.50**	**250**
Fig. 1-10	**2.65**	**12.00**	**23.50**	**270**
Fig. 2-10	**2.50**	**11.00**	**21.50**	**252**
Fig. 10-8	**2.75**	**12.25**	**24.00**	**300**

For description of numbers, see those given for our pine hives at bottom of page.

S. S. Co.'s Dovetailed Western Pine Hives

This is our lowest priced hive and is the best value we can offer. It is standard size and well and carefully made of first-class lumber. The inside fixtures are just the same as in our regular pine hives, and the sections supplied are of the best grade of white Eastern basswood. For general description of the different numbers see corresponding numbers and descriptions under Eastern Pine Hives, bottom of page.

	Each Nailed	K. D. 5	Packed 10	Weight 10
Fig. 1-8	**$2.30**	**$10.25**	**$20.00**	**280**
Fig. 1-8, less Super.	**1.60**	**7.10**	**13.75**	**205**
Fig. 2-8	**$2.00**	**$9.25**	**$18.00**	**265**
Fig. 2-8, less Super.	**1.55**	**6.85**	**13.25**	**195**

S. S. Co.'s Dovetailed Eastern Pine Hives

Descriptions and Prices

Order by Figure Number. Five Hives at Same Rate as Ten.

Fig. 1. Dovetailed Hive.—(Complete with 1 super) consists of 1 bottom board, 1 body, 1 super, 1 cover, 8 Hoffman brood frames, 1 division board, 2 tightening springs for super, 6 section holders, 6 slotted separators, 24 sections and foundation starters for frames and sections and nails.

Nailed, $2.95 each; per 10 K. D. flat, $26.50.

Fig. 2. Dovetailed Hive is the same as Fig. 1, less sections and foundation starters.

Nailed, $2.70 each; per 10, K. D. flat, $24.00.

Fig. 3. Dovetailed Hive is the same as Fig. 1, except it has two supers instead of one.

Nailed, $3.80 each; per 10, K. D. flat, $34.75.

Fig. 4. Dovetailed Hive is the same as Fig. 3, less sections and foundation starters.

Nailed, $3.35 each; per 10 K. D. flat, $30.00.

Fig. 10. Dovetailed Hive (complete two-story for extracting), consists of one bottom board, 2 bodies, 1 cover, 16 Hoffman brood frames, 2 division boards and nails.

Nailed, $3.05 each; per 10 K. D. flat, $27.25.

This hive is similar to the Root Dovetailed Hive except that it is made from a little different kind of Eastern Pine, but is first-class.

NEW
A B C and X Y Z of BEE CULTURE
$2.15 postpaid

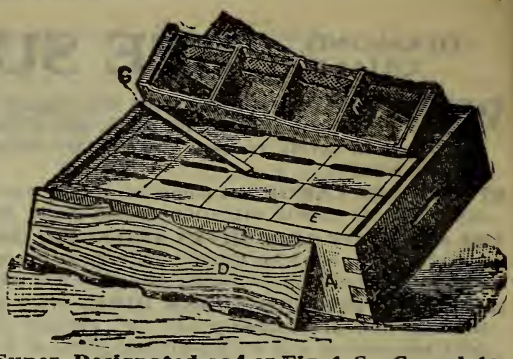
AE64S Hive for 4¼-4¼-1⅞ Sections

We advise the use of the above combinations, but if you want sections or separators of other designs, make note in your order.

Spokane Seed Co.'s Dovetailed Supers

Unless otherwise ordered we always send S super for the regular stock 4¼x4¼x1⅞ sections and wood separators. (See cut.)

	Nailed or K. D.	P'ck'd in 5	Flat 10	Wt. of 10
Fig. 1-8 Pine	**$1.00**	**$4.35**	**$8.50**	**75**
Fig. 1-8 Western Pine	**.95**	**4.15**	**8.00**	**75**
Fig. 1-8 Cedar	**1.00**	**4.35**	**8.50**	**70**
Fig. 2-8 Pine	**.80**	**3.45**	**6.75**	**65**
Fig. 2-8 Western Pine	**.75**	**3.25**	**6.25**	**65**
Fig. 2-8 Cedar	**.80**	**3.50**	**6.75**	**60**
Fig. 8-8 Extracting Super.	**.90**	**4.00**	**7.75**	**80**
Fig. 0-8 Empty Wes'n Pine	**.35**	**1.60**	**2.85**	**40**
Fig. 0-8 Pine	**.40**	**1.90**	**3.50**	**40**
Fig. 0-8 Empty Cedar	**.40**	**1.80**	**3.30**	**40**



Super, Designated as 4 or Fig. 1-S—Complete.

For Description of Super Number See Corresponding Number Describing Hives.

Root's Hive Combinations and How to Understand Them

To accommodate various localities and bee keepers of different preferences, we have a large number of different combinations, and each combination is indicated by a series of letters and figures. A glance at the following table showing the meaning of each letter or figure in alphabetical and numerical order will make all plain.

A. Danzenbaker bottom.

E. Excelsior cover.

G. The gable cover.

I. Super for Ideal plain sections, 3⅝x5.

M. Super 4x5 plain sections for the Danz. hive.

P. Super equipped for plain 4 ¼ sections.

Rc. Metal roof, double cover.

S. Super for 4 ¼ beeway sections.

2. Super with section holders, separators of fences, but no sections or foundation.

4. Super with section holders, separators or fences, sections and foundation starters.

5. Hive body or brood chamber, with frames and division board but no starters.

6. Hive body or brood chamber with frames, division board, and foundation starters.

7. Complete Hive Body with full sheets of foundation, without cover or bottom.

8. Indicates hive with 8 brood frames.

10. Indicates hive with 10 brood frames.

When the figures are doubled, it indicates that two of the articles are called for. For instance, 2-2P means two supers with plain section holders and fences.

If you desire a Danz. bottom-board, Excelsior cover, 8-frame dovetailed hive with frames, foundation and super with section holders, 4 ½ plain sections, fences and foundations, the number would stand thus: AE64P-8.

If you wish two supers, in place of the one you would add another figure 4, and the whole would read for 8-frame hive; or if you wanted this same combination without foundation or sections, the designation would be AE522P-8.

Improved Appliances of the A. I. Root Co.

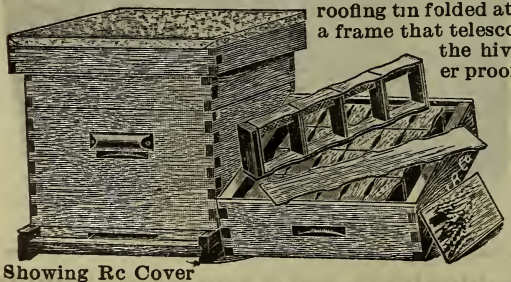
DANZENBAKER HIVES.—These hives take the same Cover, Bottom Board and Super as the ten-frame dovetailed hive, but the Brood Chamber is more shallow, taking ten closed end Brood Frames 7 ½ inches deep and 17 inches long; each is supported by a pivot in the center of the end bars, a great improvement, as the frames can be reversed and filled out to the ends; it also prevents bees mashing in handling.

The Section Holder has the same kind of Pivot Support, and a fence separator is used. The Section is a plain 4x5x1⅜, a size and shape that is very pleasing to the eye, and therefore a good seller. The arrangement in the super is such as to get perfect results in filling out the sections, and in no other hive are they so uniformly and attractively finished. While the Danz. Hive is more shallow than the standard Langstroth it has exactly the same Cubic Capacity as the eight-frame Dovetailed Hive. For prices see page 141.

Metal Roofed Double Cover—Rc.

Consists of a ⅜ inch super cover, tin-bound, that should be supported a full bee-space above the sections; this is designated as **c.** The outside part of the cover is made of a solid sheet of lead coated roofing tin folded at the corners around a frame that telescopes over the top of the hive making a weather proof cover that will not blow off, warp or leak. This top is the **R** part of the combination cover listed and sold complete as **Rc.**

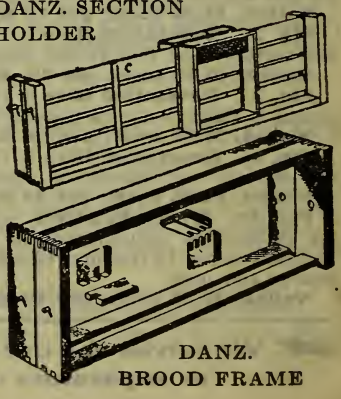
Add 25c per hive when Rc cover is ordered in place of regular cover.



Showing Rc Cover

Price, Rc Covers, each, 85c; per 10, $8.00.

DANZ. SECTION HOLDER



DANZ. BROOD FRAME

Dovetailed Hives and Fixtures—Continued

Root's Dovetailed Pine Hives--Different Combinations	Each Nailed	K. D.	In Flat	Wgt. of 10
HIVES:		5	10	
Fig. 1 (A-E or A-G, 6-4, S or P) 8 frame body and 1 super, all complete with starters	$3.30	$14.85	$29.25	280
Fig. 1 (A-E or A-G, 6-4, S or P) 10 frame body and 1 super, all complete with starters	3.45	15.75	31.00	320
Fig. 2 (A-E or A-G, 5-2, S or P) 8 frame body and 1 super, all complete less section and starters	2.95	13.50	26.50	260
Fig. 2 (A-E or A-G, 5-2, S or P) 10 frame body and 1 super, all complete less sections and starters	3.20	14.50	28.50	300
Fig. 3 (A-E or A-G, 6-4-4, S or P) 8 frame body and 2 supers, all complete	4.25	19.50	39.00	350
Fig. 4 (A-E or A-G, 5-2-2, S or P) 8 frame body and 2 supers, all complete, less sections and starters	3.65	16.75	33.00	320
(A-E or A-G, 6) 8 frame body only, with frames, division board and starters	2.35	10.40	20.25	195
(A-E or A-G, 5) 8 frame body only, with frames, division board and no starters	2.20	10.15	19.75	190
Fig. 10 (A-E or A-G, 5-5) 8 frame body, two story	3.50	16.00	31.25	320
HIVE BOTTOM:				
A-Danzenbaker bottom-8	.45	2.10	4.00	40
HIVE COVERS:				
E-Excelsior or G-gable cover-8	.55	2.40	4.60	40
HIVE BODIES (Brood Chamber):				
Empty body for 8 frames 9 ½ inches deep with tin rabbets	.85	4.00	7.70	80
5-Body-8, with frames and division board	1.25	5.70	11.10	130
6-Body-8, with frames, division board and starters	1.35	6.05	11.90	135
SUPERS:				
Fig. 1 (4 P, S or I) 8, all complete with starters and sections	1.05	4.75	9.25	75
Fig. 1 (4 P, S or I) 10, all complete with starters and sections	1.15	5.15	10.00	100
Fig. 2 (2 P, S or I) 8, all complete, less starters and sections	.90	3.70	7.15	65
Fig. 2 (2 P, S or I) 10, all complete, less starters and sections	.95	4.15	8.00	80
Fig. 0 Plain supers, with flat tin; empty	.45	1.85	3.50	40
DANZENBAKER HIVES:				
A E D, 6-4 M-10	3.70	17.25	34.00	330
A Rc D, 6-4 M-10	3.90	18.25	36.00	.....
A E D, 5-2 M-10	3.30	15.25	30.00	300
A Rc D, 5-2 M-10	3.50	16.25	32.00	.....
A E D, 5-10	2.25	10.15	19.75	200
SUPERS:				
Danz. 4 M-10 super	1.55	6.60	13.00	120
Danz. 2 M-10 super	1.35	5.85	11.50	100

Note.—D, Danzenbaker cover; M, Danzenbaker super.

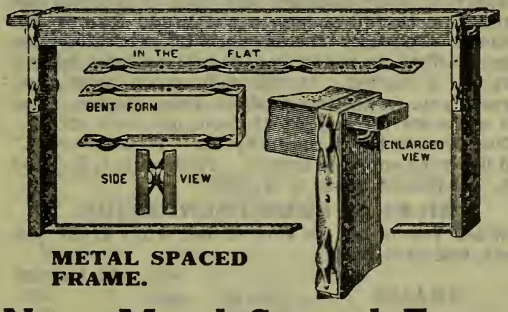
Hoffman Brood Frames

The Hoffman Improved Foundation Fastening Frames (see cut) are the latest, most satisfactory brood frames. The top bar is made with a beveled strip, which holds the foundation absolutely in place, perfectly straight and exactly in center of top bar. Any one can put foundation in these new frames very rapidly.

PRICE OF HOFFMAN FRAMES.

	Wt. per 10	Per 10	Per 100
Improved F. F. Root's	4 ½ lbs.	**45c**	**$4.00**
Improved F.F.S.S.Co.'s	4 ½ lbs.	**40c**	**3.75**
Western	4 ½ lbs.	**40c**	**3.15**
Half Hoffman	2 ½ lbs.	**35c**	**3.00**
Danz. Reversible	2 ½ lbs.	**45c**	**4.00**

The Half Hoffman Frame is used in the Ideal super and for extracting only.



METAL SPACED FRAME.

New Metal Spaced Frame

Recommended where there is much propolis. Spacing is accurate and frames handle easily.
Price, per 10, 50c; 100, $4.50. Wt. per 10, 5 lbs.
METAL SPACERS ONLY
Per 100 Pair. Wt. 1 ¼ lbs. **$1.00**

Section Holders

Six section holders with separators, one follower and wedge are put in each 24-lb. super, and each section holder holds four one-pound honey boxes. The bottom strip is ¼-inch thick, and is cut out to fit insets of the slotted sections—tne style generally used.

Root's 1⅛x18⅛ inches, slotted. Wt.23 lbs.per 100
Each, 4c; per 100, $3.05

Western, 1⅛x18⅛ inches,slotted.Wt.29 lbs.per 100.
Each, 3c; per 100, $2.50

Root's, 1 ½x17 ½ inches, plain. Wt. 15 lbs. per 100.
Each, 3c; per 100, $2.70

Danzenbaker, reversible. Wt. 24 lbs. per 100.
Each, 4c; per 100, $3.35

Bottoms only—
1⅛ in. wide. slotted. Wt. 11 lbs. per 100.
Each, 2c; per 100, $1.60

Section Honey Boxes

Our No. 1 Sections are made of the choicest white basswood lumber, and are all perfect in finish and free from defects. They are not all snow-white, but vary from that to a light cream color. Choice honey shows off to best advantage in a section not too white, as it is the honey rather than the wood that the consumer looks at. Wt., 6 ¼ lbs. per 100.

Root's No. 1, best white, per 100, 85c; per 500, $3.60; per 1000, $7.00

Spokane Seed Co.'s No. 1, per 100, 75c; per 500, $3.40; per 1000, $6.50

Our No. 2 Sections, selected from our best grade, sell at a price considerably less than our No. 1, and are correspondingly lower in quality. Most of them are equal to No. 1, except in color; some have dark spots, sawmarks, or other blemishes which exclude them from No. 1 grade. Wt., 6 ¼ lbs. per 100. **Root's No. 2, second grade, per 100, 75c; per 500, $3.40; per 1000, $6.50**

S. S. Co.'s No. 2. Wt. 6 ¼ lbs. per 100. **Per 1000, $6.00**

Order any of the following sizes wanted. We have 4 ¼x4 ¼x1⅞, generally used and always sent unless otherwise ordered; 4 ¼x4 ¼x7 to the foot; 4 ¼x4 ¼x1 15-16; 4 ¼x4 ¼x1 ¾. The 4 ¼x4 ¼x1 ½, 3⅝x5x1 ½, and 4x5x1⅞ plain sections, having no beeway, are 25c per 1000 less.

Different Styles of Sections.

Style *1 Beeway*, commonly called closed-top.

Style *2 Beeway*, open top and bottom. This style is sent when no other is specified.

Style *3 Beeway*, open three sides.

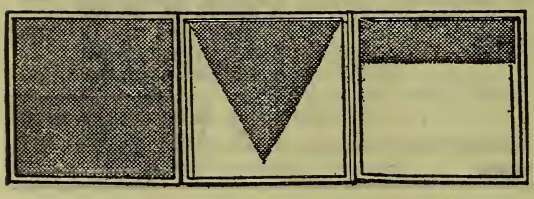
Style *4 Beeway*, open on all four sides.

Style *5 Plain*, no beeways. Used with fences.

Style *5 M*, 4x5x1⅞ plain, no beeways.

For large quantities, other sizes, etc., write for special prices. If ordered by mail, allow 1c each for postage. Sample section, by mail, 1c each.

Comb Foundation



Full Sheet, Triangular and Quarter Sheet Method of Using Foundation.

There is little question but that it pays to use foundation in full sheets in the brood frames and sections, especially the latter. If you think you cannot afford so much you should at least have a strip for a starter. It will help much more than it costs you, in getting straight, even combs. You can use a starter any width from one inch up.

Our foundation is made by the "Weed process," and is a very superior article. Packed in 1, 2, 3 and 5-lb. cardboard boxes in a case.

PRICES OF COMB FOUNDATION.

When you order, be sure to tell what grade you want, and give price.

GRADE	Size of Sheets	No. per lb.	In Lots of 1 lb.	In Lots of 10 lbs.
Light Standard Brood	7 ¾x16⅞	7	$0.70	$0.68
Extra Light Brood	7 ¾x16⅞	9	.73	.70
Light Section	3⅞x15 ½	28	.75	.73
Extra Light Section	3⅞x15 ½	30	.80	.76

☞ *Write for lowest market prices on larger orders.*

Separators

One separator should always be placed between each section holder so that the bees will build the honey comb even in each section (see illustration of supers, page 140).

Slotted Wood Separators, 4 ½x18, Eastern. Wt. 8 lbs. per 100. **Per 10, 15c; per 100, $1.20**

Slotted Wood S. S. Co.'s Wt. 8 lbs. per 100. **Per 10, 15c; per 100, $1.10**

Western (Veneer). **8 lbs. per C; per 100, 80c**

Plain Separators, Wt. 6 ¼ lbs. per 100. **Per 10, 15c; per 100, $1.05**

Fence Separators, P. or I., Wt. 13 lbs. per 100. **Per 10, 30c; per 100, $2.45**

Fence Separators, Danz., M. Wt. 16 lbs. per 100. **Per 10, 30c; per 100, $2.50**

Honey Shipping Cases

These have a glass front, and corrugated, non-dripping packing, which protects against breakage, and are designed for marketing honey. If you expect to get the best market price, you must put your honey up in nice cases.

PRICE LIST OF SHIPPING CASES

Non-Drip—	Nailed Each	Flat 10
12-lb.	$0.20	$1.85
24-lb., Western	.25	2.25
24-lb., Eastern	.30	2.85
24-lb., for 3⅝x5 Sections	.30	2.70
32-lb., for 1 ½-inch Sections	.30	2.85
24-lb., for Danzenbaker Sections	.30	2.70

$15.50 - BEGINNERS' OUTFIT - $15.50

To the inexperienced we recommend the following complete equipment, including the Bees, and all that is necessary to properly care for them.

One copy A B C and X Y Z of Bee Culture, new edition.
One Fig. 1-8 P. S. Co.'s Dovetailed Western Cedar Hive.
One Colony of Italian Bees in Dovetailed Hive.
One Clark Cold Blast Smoker.
One Parker Foundation Fastener.
One Porter Bee Escape Mounted.
One Pair Long Cotton Gloves.
One Bee Veil No. 2.

All Complete, F. O. B. Spokane, $15.50

FREE We include with this outfit one year's subscription to "Gleanings in Bee Culture." The Best Bee Magazine published.

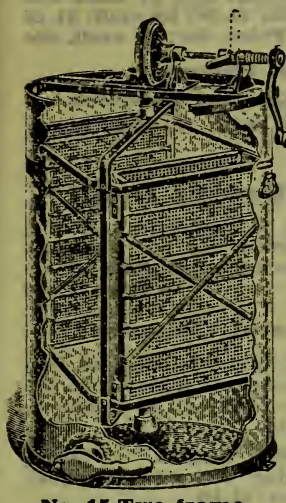
BEES MUST GO BY EXPRESS—A colony weighs about 40 pounds.

THE SUPPLIES CAN GO BY FREIGHT and weigh, packed for shipment, 40 pounds.

Hive Fixtures and Supplies—Continued

Honey Extractors

Ball bearings and slip gear devices are furnished on all of our Extractors.



No. 15 Two-frame Reversible Cowan

THE NEW ROOT AUTOMATIC EXTRACTOR

No. 25-B. Fitted with a brake that reverses the frames instantly without jar or injury and without stopping. This is an exclusive feature of the Root Automatic. We furnish the 4 frame size. Weight 210 lbs.

Price, $39.50

No. 5-B, NOVICE. Two frame for any size frame not over 9 ½ by 18 ½ inches; weight, 45 pounds.

Price, $13.75

No. 15-B, COWAN REVERSIBLE.

Two Frame. Weight, 85 lbs. **Price, $20.00**

Wax Extractors

Doolittle Solar Wax Extractor. With this the sun supplies the heat; weight 30 lbs.

Price, $5.50

Root's German Wax Extractor. Price, $14.00

Hatch Wax Press. Price, $8.00

Swiss Wax Extractor. Comb is put in wire basket inside of can and set over hot water. Simple and good.

Price, $4.25; with steam generator, $5.25

Porter Honey House Escape

No extracting room is complete without one or more of them. **Each, 25c; postpaid**

Foundation Fasteners

PARKER'S A satisfactory and serviceable tool. **Weight 1 lb. Price, 40c**

DAISY FOUNDATION FASTENER. Will put starters in better and faster than any machine before introduced. Weight, 5 ½ lbs.

Price, without lamp, $1.15; with lamp, $1.40

Van Deusen Wax Tube Fastener.

Price, 20c; by mail, 25c

Wire Imbedders

The Easterday. Weight 4 ozs.

Price, 20c; by mail, 25c

Spur Wire Imbedder. Teeth set so as to straddle the wire while imbedding it. Weight, 4 ozs. **Price, 20c; by mail, 25c**

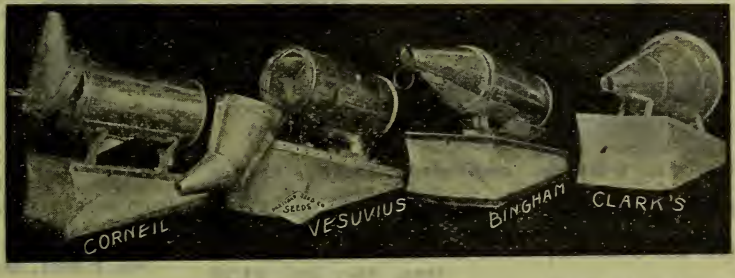
Smokers

(See cut)

Every owner of a hive of bees should have a smoker. A few blasts of smoke will quiet the bees so that they can be handled with safety. (See cut of the leading kinds.)

Clark's Cold Blast. Probably the most popular smoker in use today. Weight 1 ¼ lbs.

Price, 75c



Improved Corneil

Makes a good strong blast. The most satisfactory and serviceable smokers.

Standard size, 3 ¼-inch, weight 2 lbs. $1.00
Standard Jumbo, 4-inch, weight 2 lbs. $1.50
Standard Copper, 3 ¼-inch, weight 2 lbs. $1.75
Junior, 2 ½-inch, weight 1 ¼ lbs. 85c

Danz, Victor. Combined hot and cold blast. Weight 1 ¾ lbs. **Price, $1.15**

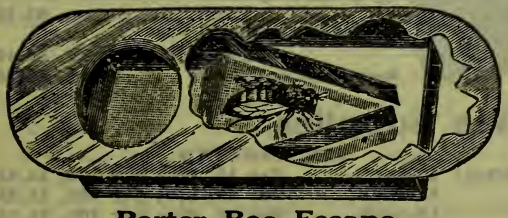
Bingham Smokers

Strong, well made. The **"Conqueror"** and **"Doctor"** not excelled for use in large apiaries.

Bingham Conqueror. Weight 1 lb. **$1.00**
Bingham Little Wonder. Weight 1 lb. **60c**
Bingham Doctor. Weight 1 ½ lbs. **$1.25**
Bingham Large. Weight 1 lb. **85c**
Bingham Engine. Weight 1 ½ lbs. **$1.50**

Hive Parts

Division Boards. Each, 10c; 10 for 90c
Followers. Each, 5c; 10 for 35c
Tightening Spring. Each, 1c; 10 for 8c



Porter Bee Escape

Great Labor-saver. Weight 2 ozs.

Price, 20c, postpaid

Mounted. Weight 2 ¼ lbs. **Each, 40c**

Bee Entrance Guards

Root's or Tinker's. These are to admit workers, but exclude drones. Weight ¼ lb. **Price, 15c**

Improved Wire Front, Price, 20c; by mail, 25c

Alley's Drone and Queen Trap

A non-swarming device. Weight 1 lb.

Each, 55c

Improved Wire Front. Weight 1 ¼ lbs.

Each, 60c

Feeders

Alexander. Latest out. Used under rear end brood chamber. Weight 1 ¼ lbs. **Price, 30c**

Simplicity. Weight 6 ozs. **Each, 10c**

Miller's. Sets on hive like a super; holds about 25 lbs. of syrup. Weight 5 lbs. K. D.

Nailed up complete, 40c; in flat, 35c

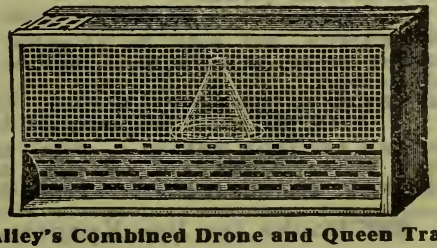
Boardman's. Weight ½ lb.

Price, 30c; without jar, 20c

Division Board Feeders. Weight 1 ¾ lbs.

Each, nailed, 30c

ALLEY'S COMBINED DRONE AND QUEEN TRAP



Alley's Combined Drone and Queen Trap

Hive Fixtures and Supplies—Continued

Bee Brushes

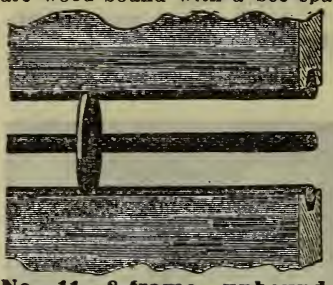
Coggshall's. (See cut). **Price, 20c; by mail, 25c**
Dixie. (See cut). **Price, 20c; by mail, 25c**

Gloves, Rubber

Ladies. Sizes 7, 8, 9. **Price, $1.50; by mail, $1.60**
Men's. Sizes 10,11,12. **Price, $1.75; by mail, $1.85**
Men's Half Long. Sizes 13, 14, 15.
Price, $2.00, by mail, $2.10
COTTON--Long Sleeves. Price, 70c; by mail, 75c
Note.—To insure getting proper size, mark outline of hand on sheet of paper.

Honey Boards

Used to confine the queen to the brood chamber. Nos. 1 and 11 are unbound zinc. Nos. 12 and 13 are wood-bound with a bee space one side.



NEW STYLE WOOD AND WIRE HONEY BOARD

No sharp edges for the bees to pass over.

No. 11. 8-frame, unbound, 12x19½ inches
One, 35c; ten, $3.40
No. 1. 10-frame, unbound, 14x19⅛ inches
One, 40c; ten, $3.80
No. 13. 8-frame, wood-bound, 13⅞x20 inches
One, 45c; ten, $4.20
No. 12. 10-frame, wood-bound, 16x20 inches
One, 45c; ten, $4.35
No. 8. 8-frame, wood and wire, 13⅞x20 inches
One, 45c; ten, $4.00
No. 7. 10-frame, wood and wire, 16x20 inches
One, 50c; ten, $4.40

Perforated Zinc

Used for making honey boards, also entrance guards, queen and drone traps, etc.
Perforated sheets, each, 32x96, Weight 6 lbs., $3.85. Less than a sheet, per square foot, Weight 4½ ozs., 20c.

Manum's Swarming Device

A most complete swarming device. The swarmer is light, conveniently carried, and will reach a swarm 20 feet from the ground. **Complete, $1.90 wire basket, with bail, no pole, $1.50. Weight 3½ lbs.**

Honey Knives

Novice. **Price, 85c; by mail, 95c**
Quinby. **Price, $1.00; by mail, $1.10**
Bingham. **Price, 80c; by mail, 90c**

Cages for Queens

Benton. For mailing and introducing.
Each, no candy, 5c; by mail, 7c; with candy each, 10c. by mail.

Root's Queen Rearing Outfit

A complete set of tools and materials, including book of instructions, enabling any one with very little experience to rear his own queens at small expense. **Price, $5.00**

Queen Bees and Colonies

We are in a position to furnish full-blooded Italian queens, and full colonies. It takes about five days to get these in from the apiary, so do not expect queens by return mail.

Untested Queen. April, **$1.75;** May, June, July, August, September, **$1.50.**

Tested Queen. April, May, June July, August, September, **$2.50**

Selected Tested Queen. April, **$3.50;** May, June, July, August or September, **$3.00**

Full Colony. In an 8-frame hive. **Price, $8.00**

Bee Veils

Globe. Has five bars that will keep veil away from head. Weight, 6 oz. **Price, $1.00**
Hat Veils. These veils have a rubber band round the top, so as to fit the hat snugly.
No. 1 Veil, made entirely of silk tulle.
90c, postpaid
No. 2 Veil, cotton tulle, silk face.
65c, postpaid
No. 3 Veil, cotton tulle throughout.
50c, postpaid
Alexander. **80c, postpaid**

No. 30 Tinned Wire

¼-ounce spools.
Each, 5c; dozen, 45c
½-pound spools.
Each, 15c; dozen, $1.50
½-pound spools.
Each, 25c; dozen, $2.25
1-pound spools.
Each, 35c; dozen, $3.45
5-pound coils. **Each, $1.35**

Miscellaneous Bee Supplies

QUEEN CELL PROTECTOR. Doolittle.
Each, 3c; by mail, 5c
WEST'S CELL PROTECTOR.
Each, 8c; 10 for 65c; by mail, 75c
WEST'S SPIRAL CAGE.
Each, 10c; 10 for 85c; by mail, 95c
HIVE CLAMPS. per pair, 5c; 10 pairs, 40c without screws, 10 pairs, 35c. Add 3c per pair postage.
HILL'S DEVICE. For covering frames in winter.
Each, 10c; 10 for 80c; postpaid, $1.10
HUBBARD SECTION PRESS. **Price, $3.65**
ROOT'S SECTION PRESS. **Price, $2.35**
HIVE TENT, weight 6 lbs. **Price, $3.25**

TIN RABBETS

Price: 12-inch.....Per 10, 15c; per 100, $1.45
14-inch.....Per 10, 15c; per 100, $1.45
15-inch.....Per 10, 20c; per 100, $1.65

T-TINS

Price: 12-inch.....Per 10, 15c; per 100, $1.45
13¼-inch....Per 10, 15c; per 100, $1.45
14-inch.....Per 10, 15c; per 100, $1.50
16-inch.....Per 10, 20c; per 100, $1.65
18 to 20-inch Per 10, 25c; per 100, $2.10

FLAT TINS

Price: 12-inch.....Per 10, 10c; per 100, 65c
13½-inch ....Per 10, 10c; per 100, 65c
14-inch.....Per 10, 10c; per 100, 65c
15-inch.....Per 10, 10c; per 100, 80c

Books for Bee Keepers. See Book List, pages 62 and 64.

The Value and Necessity of Bees in Orchards

The Transmission of Pollen Through the Air

Excerpt from Bulletin 104 of the Oregon Agricultural College

Experiments were conducted by Professors C. I. Lewis and C. C. Vincent.

IT HAS been a question just how much the wind aids in carrying pollen from tree to tree. If the wind does aid in carrying pollen, is it distributed in sufficient quantities to insure fertilization? Since so many of our varieties of apples are known to be self-sterile and must depend upon foreign pollen, this question is of serious consequence.

Is It the Wind or Our Common Honey Bee that Does the Work?

From the observations made the past two years, it is evident that bees play an important part in the fertilization of the blossoms. To arrive at some definite conclusions as to how much pollen is transmitted through the air by the wind, experiments were carried on to determine this question. Waugh, of Massachusetts, demonstrated that plum pollen was not carried through the air in sufficient quantities to insure cross-pollination. To substantiate his statements the authors carried on some experiments with plums as outlined by him, and arrived at the same conclusions.

To determine whether apple pollen was carried through the air by the wind, in sufficient quantities to insure cross-pollination, experiments were conducted in the following manner: Small glass slides, one by three inches, were smeared with vaseline and placed at different distances and at different heights from certain large trees in the orchard. In this case two of the largest trees in the orchard, the Rome Beauty and the Mammoth Black Twig, were selected. After an exposure of twenty-four hours the slides were taken to the laboratory and examined under the microscope. The following table indicates the results obtained:

TABLE I.

Showing Distribution of Pollen by Wind.

Slide Number	Distance from Trunk of Tree	Height of Slides	Number Pollen Grains
1	4 feet	On Ground	16
2	12 feet	6 feet	9
3	15 feet	4 feet	11
4	15 feet	6 feet	8
5	20 feet	9 feet	6
6	30 feet	6 feet	7

During the experiment a strong north wind was blowing, and the trees were in the height of their blooming period.

The conclusion to be drawn from this experiment is that the wind cannot be relied on as an agency to transfer pollen from tree to tree throughout the orchard.

To verify our last experiment the following work was carried on: A seven-year-old tree, containing 1,500 blossoms, was emasculated and left exposed to the wind and insect visitation. The object of this experiment was two-fold:

First, to determine if pollen was transmitted through the air in sufficient quantities to insure cross-pollination; second, to determine if removing the floral part of the blossom would affect the visits of insects. The tree operated upon was located about twenty feet from another tree that blossomed profusely.

It is generally conceded by many experimenters that the honey bee is attracted to the blossom by the inflorescence. The results obtained will be a fair index as to the truth of this statement. Out of the 1,500 blossoms emasculated only five set fruit. During the whole period that the pistils of these blossoms remained receptive, only eight bees visited the tree. More than twice that number was seen in one-half hour on the tree twenty feet away. Since only a small portion of the emasculated blossoms set fruit, it is manifest that pollen is not transmitted through the air in sufficient quantities to insure cross-pollination.

While this experiment demonstrated the fact that bees will visit trees when the floral part of the blossom is removed, they are not attracted in sufficient numbers to insure perfect pollination. It is apparent that the showy petals of the blossoms aid materially in attracting the bees. The blossom is well supplied with nectar, and the open character of nectary makes it accessible to almost all insects. The bees, in trying to reach the nectar, brush against the anthers and carry with them, on their hairy legs and abdomen, large quantities of pollen. The insects in visiting other blossoms transfer some of the foreign pollen to these pistils. *Since the wind aids so little in cross-pollination it is evident that the various insects, especially the bees, are carriers of pollen from one variety to another.*

☞ **As the assurance of a crop depends upon insects as distributers of the pollen, it is necessary that apiaries be established in the different fruit sections. With favorable climatic conditions and proper planting of varieties the bees will insure pollination.**

BEES---How to Keep and Handle Them

A Few Questions and Answers for Beginners

In presenting this list of questions it should be understood that it is impossible, in many instances, to do justice to the subject in the short space here allowed, and for full particulars we refer the reader to our encyclopedia on bees—the A B C and X Y Z of Bee Culture—a book that is of inestimable value to the beginner and expert as well. See description and further particulars on inside of front cover.

Q. Where can bees be kept?

A. There are few places in the country where one or more colonies of bees cannot make honey. It is true that the natural surroundings may be unfavorable to the bees, but one who has had no experience is often astonished as to distance bees will go in search of nectar of the flowers. In almost every large city there are some bee-keepers who have bees right in the heart of the city, either in back lots or on the roof of buildings. Ordinarily, bees will go from one to three miles in search of nectar, but if there is none nearer they will go much further. There are cases on record of bees going seven miles from home.

Q. Do bees ever make trouble in a city?

A. It is very seldom that bees make trouble of any sort in a town or city, and if the bee-keeper is careful, there need be none at all. We advise placing the hives in the back yard as far away as possible from the general highway.

It is true that in some few cases city councils have attempted to pass ordinances declaring bees to be a nuisance; but no such ordinance is constitutional, as the supreme court of Missouri in what is known as the Arkadelphia case, has decided that bees are not a nuisance per se. A similar case was tried in Rochester with the result that a verdict was rendered in favor of the bees. Full particulars concerning these can be obtained by addressing General Manager N. E. France, of the National Bee-keepers' Association, Platteville, Wis.

Q. What must be planted for bees to work on?

A. Strange as it may seem, it usually does not pay to plant anything that is valuable only for the honey unless waste places such as roadsides or fence corners can be utilized that would be of no value in any other way. Very often the natural sources of nectar in a locality can be augmented by the sowing of sweet clover seed, and, since this is becoming to be known as a valuable forage instead of a pest or weed, as it was formerly called, there is no question but that it pays to grow sweet clover for hay and thus secure some additional honey of fine quality, also. However, it must be remembered that each blossom yields only a small amount of nectar, hence there must be hundreds of acres of any such plant before any great difference will be noticed in the surplus honey produced, if there are very many bees in the locality. However, as stated first, almost every locality has enough natural sources of nectar to support one or more colonies without artificial pasturage.

Since alfalfa clover and alsike clover are being grown more and more even by the farmers of the East, there is every reason to suppose that there will be more honey produced from these sources in the future than ever before. Buckwheat is a good yielder and especially valuable for furnishing nectar in the late summer to keep up brood rearing.

Q. Do bees do well in a fruit country?

A. The fruit trees alone, unless there are acres and acres of them, do not usually furnish enough honey to be noticeable in the surplus supply secured, but of course there are many exceptions to this in localities where fruit is grown extensively. In this connection, however, it might be well to state that bees are a necessity in a fruit growing locality, for without their aid the blossoms do not set, that is the cross fertilization is not accomplished. It is true that the wind and other insects distribute the pollen to a certain extent and thus fertilize the blossoms, but at the same time, if there are no bees at all a great many of the blossoms will not bear fruit. A simple experiment may be tried to prove this: Cover a branch of blossoms with coarse mosquito netting which will just prevent the bees from getting through, and it will be found that the blossoms on this branch will not bear fruit, even though the netting is removed as soon as the petals fall.

Q. Do bees work on ripe fruit and spoil it?

A. If the skin of the fruit has been punctured by some other insect or by the birds, it is true that the bees will work on the pulp and juice of the fruit thus exposed, but such fruit would be unfit for market anyway, hence the bees after all do no real harm. Bees by themselves cannot possibly puncture the skin of fruit. Sound fruit, if kept carefully guarded from birds and other insects, will be untouched by the bees. This has been demonstrated over and over again.

Q. How many kinds of bees are there in a colony?

A. During the early part of the summer a normal colony consists of one queen, the only perfect female in the hive; several hundred drones (the male bees)—and anywhere from twenty to fifty thousand worker bees, which are undeveloped females. The queen is not the ruler of the hive, as was formerly supposed, but is simply the mother; she lays the eggs. A good prolific queen in the height of the season will lay from two to four thousand eggs per day, or nearly twice her own weight in twenty-four hours. Continual feeding by the worker bees enables her to do this. The drone is the male bee and he has no sting nor any suitable tongue with which to work; hence the drone does no work, not so much because he is lazy but because he has no tools to work with nor weapons with which to defend the hive. The workers are stunted females, and as their name indicates, they do all the field work such as bringing in pollen, nectar, building the comb and feeding the young.

Q. How many colonies can one man take care of?

A. This depends on the man, and so this question cannot be definitely answered any more than one could positively say how many acres of land one man could farm. However, one man with a little help in the busiest part of the season can usually care for as many as five hundred colonies if he is experienced. Colonies of bees in order to produce good results, must be properly taken care of. A hundred weak colonies not in good condition for producing honey by the time the main honey-flow opens, will not produce as much surplus as ten colonies that are very strong and in the very best condition at the time the main honey-flow begins.

Q. What profit can reasonably be expected?

A. As much as $10.00 per colony has been secured where there are only a few colonies to the locality, but this is above the average. $2.00 to $3.00 a colony would be about the figure where there are a large number of colonies.

Q. How much increase can be expected in a year?

A. If natural swarming is allowed, a fifty per cent increase is perhaps an average. No colony should be allowed to swarm more than once, or the parent colony will be too greatly reduced in strength.

☞ **The A B C and X Y X of Bee Culture** is an up-to-date complete Encyclopedia of Bee keeping for the beginner or the advanced worker and you will require no other reference work. Sent prepaid for **$2.15.**

POULTRY SUPPLIES

Foods and Remedies

WE ARE PIONEERS in the POULTRY SUPPLY BUSINESS in the Northwest, and our Famous **DIAMOND Poultry Foods** and **Supplies** are the standards wherever known.

This important part of our business is in the hands of trustworthy practical poultrymen—men of experience, who are competent to confer with and advise you on any subject pertaining to the raising of Poultry—a service that is free to you.

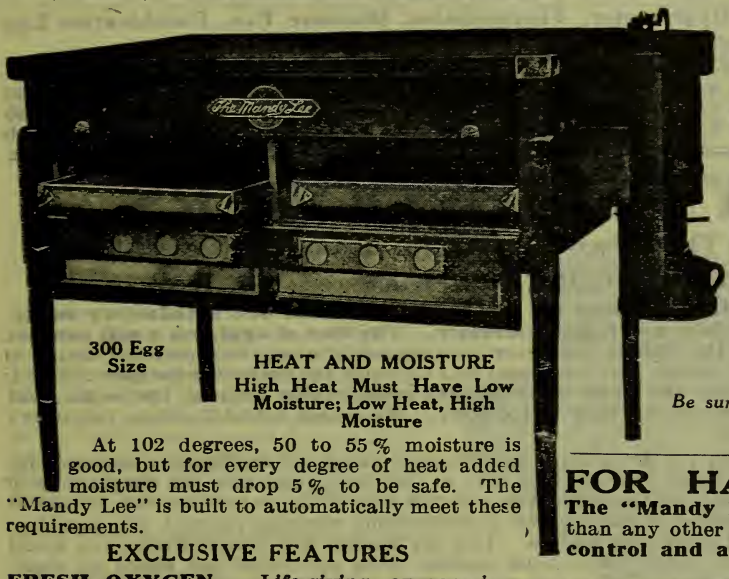
In the following pages we offer everything necessary for the successful production of Poultry and you can depend upon the supplies and appliances listed as being the standards in their line.

Poultry and Eggs are always in big demand, and prices are good. Poultrymen are now protected from the competition of cheap foreign eggs by recent legislation, and 1916 promises to be a prosperous year for the Poultryman who is properly equipped to supply the demand. Let us help you to get in line for your share of the profits.

"MANDY LEE" INCUBATORS

MANDY LEE INCUBATORS are guaranteed by the Manufacturer to hatch a larger percentage of big, healthy chicks that live than can be obtained from any other incubator, or even the mother hen—a strong guarantee, but one that is fully justified, for it is a well-known fact that "Mandy Lee" chicks are big, sturdy, healthy chicks of strong vitality that feather out quickly and grow rapidly.

"Mandy Lee" Incubators heat quickly, run evenly, regulate automatically, and do not depend upon the skill or experience of the operator, and are recognized as the best value in an incubator on the market today.

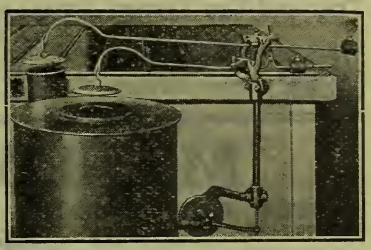


300 Egg Size

HEAT AND MOISTURE

High Heat Must Have Low Moisture; Low Heat, High Moisture

At 102 degrees, 50 to 55% moisture is good, but for every degree of heat added moisture must drop 5% to be safe. The "Mandy Lee" is built to automatically meet these requirements.



The New Automatic Regulator for Heat, Moisture and Ventilation. Direct ventilation of egg chamber if heat goes too high.

Be sure to write for the LEE BOOKLETS—Free on Request

EXCLUSIVE FEATURES

FRESH OXYGEN. — Life-giving oxygen is freely supplied at the egg level **when the chicks are coming out,** without losing the moisture or lowering the temperature.

EGG LEVEL VENTILATION. — The new **"Mandy Lee"** has large ventilators in the lower part of the door, these openings are covered with finely-woven brass wire cloth; through these ventilators fresh oxygen is constantly being supplied and the carbonic acid gas passing out. This diffusion of gases has no perceptible effect on the heat or moisture, but insures the chicks against suffocation at a time when the machine cannot be opened. The only perfect method of ventilation—no draft. No other incubator gives this important advantage.

EGG TRAY.—Has a combined wire and slat bottom, and can be used either way. Large machines are furnished with sectional trays and one extra tray for turning. This enables you to turn the eggs quickly and to change trays to any position in the egg chamber.

NEW MOISTURE PAN.—Can be removed or refilled without opening incubator.

FOR HATCHING DUCKS

The "Mandy Lee" will give you better results than any other incubator—because of the **perfect control and automatic regulation.**

Mandy Lee Hygrometer

Accurately registers the moisture, is easily read, makes possible a **sure hatch** of vigorous chicks. Free with every incubator. **Sold alone, $2.50, postpaid.**

Special adjustment of egg tray, thermometer and nursery, making the *"Mandy Lee"* Incubator *adaptable* to any size egg, from Bantam to Ostrich.

DROP NURSERY BOTTOM.—Permitting removal of chicks without opening incubator.

NURSERY TRAY.—Has a cloth bottom that can be turned up until the eighteenth day, thus cutting off the air space beneath the eggs.

FOR PRICES and SIZES of MANDY LEE Incubator, See page 142

"MANDY LEE" INCUBATORS—Continued

THE HEATING SYSTEM

THE HEATING SYSTEM insures the same degree of heat to every egg and is an exclusive **Lee feature.** Heat can be adjusted from end to end, and in the larger sizes from center to back and front. The heating pipes can be removed instantly for cleaning by drawing them out without removing the top. The hot air does not come in contact with the eggs as in other hot air incubators, but warms them by radiation through the air-tight metal pipes. The control and adjustment is so perfect that the heat will vary but a fraction of a degree, even should the outside temperature change as much as 20 degrees.

The features of the "Mandy Lee" Heater

All parts exposed to heat are fully protected by sheet metal and asbestos.

A special burner with high wick tube and wide flame slot.

NEW SINGLE WALLED CHIMNEY.
Increases the heating capacity, reducing the oil expense and lowering the outside temperature of the heater. It is also self seating and is always in place.

A LAMP BOWL IN ONE PIECE.
A SPECIAL VENT for any gas forming in the lamp.
A PERFORATED SHEET METAL CYLINDER in top of heater which puts out the lamp in case of accident.
A PROTECTING CIRCULAR SHIELD guarding the body of the Incubator.
A SELF-SEATING CHIMNEY.
AS A FURTHER PRECAUTION the lamp cannot be filled without removing it.

The "MANDY LEE" is built of air-seasoned California redwood, is of handsome cabinet construction, with cherry finish, has heavy brass and bronzed metal trimmings, double glass doors and the double walls are insulated with from 1½ to 3 inches of asbestos or mineral wool. No other incubator is so well built.

Prices and Sizes of "Mandy Lee" Incubators

All complete with Lamp, Hygrometer, Thermometer, Moisture Pan, Combination Egg Tray and Egg Tester Prices quoted are packed for shipment F. O. B. Spokane

	Wt. Crated	Price		Wt. Crated	Price
75-Egg—Mandy Lee Jr	80 Lbs.	$13.00	200-Egg	200 Lbs.	$28.00
120-Egg	133 Lbs.	22.00	240-Egg	216 Lbs.	30.00
150-Egg	160 Lbs.	25.50	300-Egg	285 Lbs.	38.00

MANDY LEE BROODERS

The Only Brooders That Provide Natural Brooding Conditions.

DIRECT CONTACT HEAT

"Mandy Lee" Direct Contact Heat Brooders are the most successful and satisfactory made. No improvement seems possible; no change necessary. The idea of applying a soft contact heat direct to the backs of the chicks was never incorporated into anything practical until Lee began the manufacture of the "Mandy Lee," nor until that time had the **correct principle** of brooding been recognized, namely, that **the little chick cannot comfortably breathe the same heat required for giving the necessary warmth to its body.** We cannot better illustrate this theory than by repeating the following:

FOR INSTANCE: Some night when you are lying in bed snugly covered and comfortably composed for sleep, just put a thermometer under your clothing next to your body, and take the temperature of the air immediately surrounding your real self. You will find it to be somewhere between 95 and 98 degrees. Now suppose that instead of this method of comfortably warming yourself, you should go and lie naked in a room heated to even 95 degrees. You can imagine how uncomfortable you would be. Perhaps you may recollect some hot summer evening when you rolled and tossed all night, unable to sleep on account of the heat. This is because you **cannot** be either **comfortable** or **healthy** if your head is **as warm as** your body. **Buy a Brooder with Blankets.**

THE HOVER—A long, narrow hover—the ideal shape heated evenly from end to end by a **triple set** of overhead pipes, one pipe passing entirely through and carrying out all the smoke, gas, etc., from the lamp, which is located **outside** the brooder.
Again, a second pipe carrying cold, pure air into the hover, which is heated by the first pipe, and that heated air heats the blanket to the **temperature of a hen's body.**
The hover blanket is made of regular bed blankets, shaped in the form of a semi-circle, hanging loosely and in the center to within an inch of the floor, and with curtain front and back. (See sectional view.)

SOFT-CONTACT HEAT—Here is how the chicks get that soft, **contact heat,** so natural, so necessary to their comfort, and so entirely absent in other brooders.
The little chicks lay with their backs up against this warm blanket, just like a hen's body, and their heads out in the open air.

☞ *There is no crowding here, no smothering, no trampling. Each chick gets just as much heat as it wants and no more. In other brooders all the chicks must get the same amount of heat, but not so in the Mandy Lee. It's a natural mother for them.*

"Mandy Lee" Brooders Come in Seven Sizes and Styles

THE NO. 1, OR REGULAR: which we recommend for all general purposes.

THE No. 2, OR SECONDARY, fills a demand for a practical, economical method for caring for chicks from three to eight weeks old.

THE 60 CHICK SIZE, for use with the **"Mandy Lee Jr."**

2 Sizes of NEW FIRELESS BROODERS, which have given splendid satisfaction, and are very popular, as they are safe and economical.

THE NEW OUTDOOR HEATED BROODERS--See following pages.

MANDY LEE BROODERS—Continued

"Hovers 'Em like a Hen."

FULL DETAILS IN THE LEE BOOKS FREE to you

Showing portion of Hover, Lamp, Extension-Chimney, etc.

No. 1 Regular "Mandy Lee."

ADVANTAGES OF THE LEE BROODER

No lamp fumes or superheated air in the hover.
Glass Front forming a comfortable exercising room for the little chicks, with similar space at back.
Opens up and cleans easily, an important feature.
All Cloth and Blankets are on wood strips, easily removable for cleaning or replacing.
Lamp Flame is always in plain sight, lamp easily removed.
A Lamp Burner that does not heat and that successfully burns medium grade oils.

No. 1, or Regular "Mandy Lee"

Outside dimensions, 3x4 feet. It is as large as any 200-chick brooder on the market, but we call it only 100-chick size—50 chicks on each side of the hover. It will hold more, but it doesn't pay to crowd. Better have 50 healthy chicks in your brooder than 100 weak, sickly ones. The cost of a few brooders is insignificant as compared to the value of the season's hatch.

PRICE, complete, including Box, Germozone, Drinking Fountain and Thermometer, $16.00

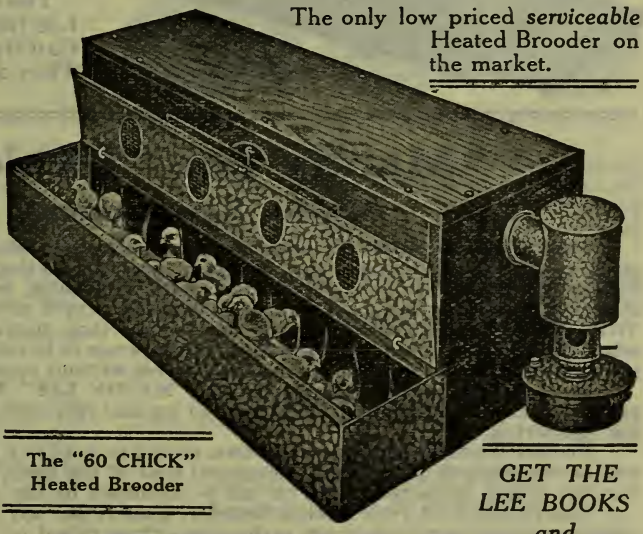
60 CHICK BROODER Heated

Lamp, heater, hover construction, cloth and metal parts, and width exactly the same as our "regular" brooder. Length of hover 30 inches; openings in swinging door covered with 60-mesh brass-wire cloth, and, when lowered either folds directly against hover opening or rests on flanged front of runway, making a rat and cat proof exercising space for the chicks. **Price, $7.00**

GERMOZONE in the drinking water keeps chicks healthy

Liquid or Tablets. 50c

The only low priced *serviceable* Heated Brooder on the market.



The "60 CHICK" Heated Brooder

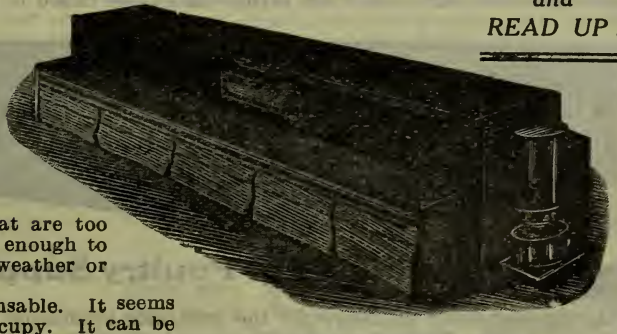
GET THE LEE BOOKS and READ UP!

No. 2 Secondary Brooder

This is a larger, more roomy and less expensive brooder for **older chicks** or those from **three to eight weeks of age.** It is all hover, and, while occupying no more floor space than the other brooder, gives fully twice the actual brooding capacity.

It is simply a mother for the chicks that are too large for the ordinary brooder, but not old enough to "hustle for themselves" during the damp weather or cool nights.

Once used this brooder is almost indispensable. It seems to fit into a place no other brooder can occupy. It can be used anywhere—in a poultry house, barn, shed, piano box—just so it is protected from wind and storm. **Price, $10.00**

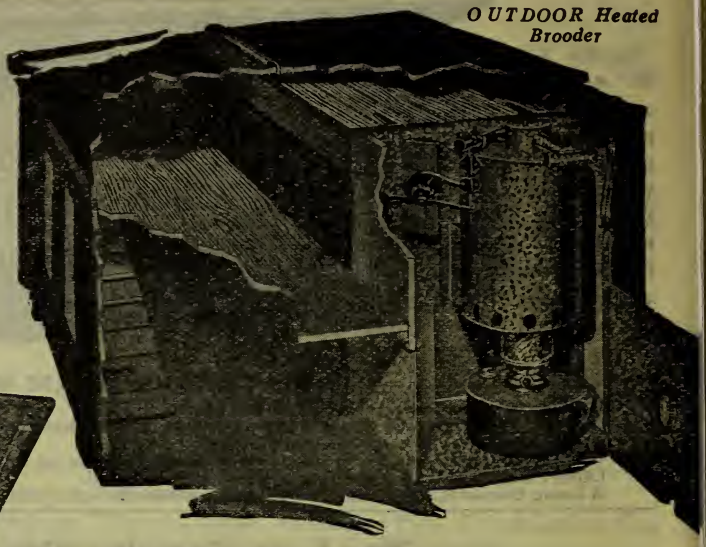


"Mandy Lee" Secondary, No. 2

NEW LEE BROODERS

OUTDOOR, HEATED and REGULATED BROODER

Instead of the usual single floor we have a double floor 3x4 feet, the lower floor being directly on the ground where the chicks come in contact with mother earth even in most inclement weather. We have the Mandy Lee contact heat under a warm Blanket—a long, narrow hover with a curtain on both sides—just like our regular brooder—just like the old mother hen. The regulator is the same style as on the incubator. Capacity 100 to 150. Weight 115 lbs.
Price, 4-foot size, $22.00



OUTDOOR Heated Brooder

No. 25 Outdoor Fireless Brooder

New Outdoor Fireless No. 25

Has rain-proof top, glass front, large feeding compartment and removable board floor. A thoroughly practical and safe brooder. Size 2x4 feet, see cut. **Price, each, $11.00**

The "MANDY LEE" Booklets tell all about Lee Incubators and Brooders, and How You Can Hatch and Raise Chickens Successfully. They are FREE ON REQUEST.

"Mandy Lee" Fireless Brooder

Safe, Economical, Practical

FIRELESS BROODERS offer many advantages in economy, safety and convenience, and under equal conditions will rear stronger, healthier, larger chicks than a heated brooder. A feature of the "Lee Fireless" is the adjustable hover; made as light as possible, being a special weave of open mesh flannel stretched on a frame in such a manner as to give a proper circulation of air and even distribution of heat. **THIS ADJUSTABLE HOVER** is the most important improvement in Fireless Brooders, and can be raised or lowered according to the outside temperature or to suit the size or number of chicks. The adjustment is easily made from the front of the Hover without opening the top.

Besides this new Adjustable Hover, "MANDY LEE" FIRELESS BROODERS have double doors, properly arranged ventilators, metal covered top and rain shield. All parts are readily accessible for cleaning and airing.

Fireless Brooders, like other brooders, should be kept in a place of even temperature as far as possible, and as the warmth depends on the natural heat of the body, enough chicks should be together to maintain the proper temperature. This can be regulated by the Adjustable Hover.

Don't overcrowd your Fireless Brooder; treat it like any other brooder and you will get larger, more vigorous chicks that feather out earlier than those raised in the heated brooders.

"Mandy Lee" Fireless Brooders are made in two sizes.

No. 8, for 100 chicks.....**$6.50**
No. 10, for 200 chicks..... **10.00**

GERMOZONE Keeps Little Chicks Healthy

Our Catalog of Poultry Supplies

Listing everything necessary for the profitable production of poultry and giving practical information on poultry diseases, care and treatment, should be in the hands of everyone interested in poultry Let us send you a copy.

Miscellaneous Poultry Supplies

"Diamond" Sanitary Self-Feeding Boxes

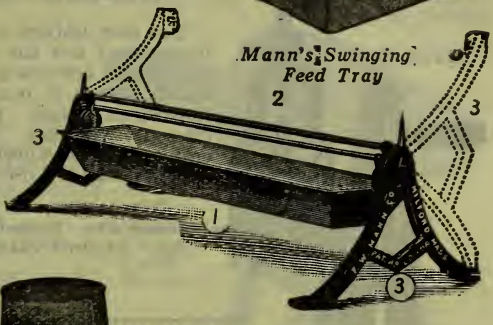
Made of heavy galvanized iron; soon pays for itself in preventing waste of feed. For keeping grit, shells and charcoal before the fowls at all times. 2 compartments. Weight, 2 ½ lbs.

Price, each, 75c. Large size, 3 compartments, weight 3 lbs., each, $1.00.

Mann's Swinging Feed Tray

For water or feed. Fowls cannot scratch dirt into it, or feed out of it, nor roost on it; yet will not tip over or spill the food out.

Price, 18-inch, weight, 5 ½ lbs., $1.25; 27-inch, weight, 6 ½ lbs., $1.50; 36-inch, weight, 8 lbs., $1.85.



Mann's Swinging Feed Tray

Diamond Galvanized Wall Fountain

(See cut.)

Something new and serviceable. To be hung on the wall or against an upright post, at any height. The patented construction protects the water from becoming soiled. Anyone can easily see the convenience of these.

One gallon size, weight 2 lbs. **Each, 65c**

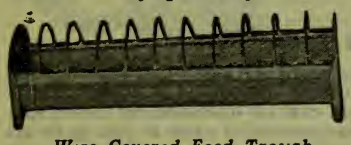
Two gallon size, weight 2 ½ lbs. **Each, 75c**

Stone Fountains

Sanitary Stone Fountain

These are strong and well finished; made in two pieces and easily washed and kept clean. They probably keep the water cooler than the galvanized fountains, but are heavier to handle and more liable to break.

Price, ½ gal., 40c; 1 gal., 60c; 2 gal., 85c.



Wire-Covered Feed Trough

Galvanized Fountains

Galvanized Iron Drinking Fountains

Our Galvanized Iron Drinking Fountains embody every good feature of the down-to-date drinking fountains, and, we believe, are the best in use. They are easily filled, cleaned and kept clean. If placed in the shade in Summer time, the water will keep nearly as cool as in an earthen vessel. They are much lighter than the earthenware fountains and are safer to ship. A dozen can be put in compact package for shipment, as they nest together. We offer them at a very low price.

Small size, weight, ¼ lb. . . . . **Each, 30c; 6, $1.70**
Large size, weight, 1 ½ lbs. . . . **Each, 50c; 6, $2.75**
Medium size, weight, 1 lb. . . . . **Each, 40c; 6, $2.25**
Extra Pans. . . . . **15c to 25c**

Wire Nest

Wire Hen's Nests

(See cut.)

Strongly made; very durable; fasten to the wall; no harbor for vermin. Weight 10 ozs. each. **Price, each, 20c; dozen, $2.00.**

Wire-Covered Feeding Trough

Decidedly convenient for young chicks. (See cut.) Weight, 1 lb. **Price, 40c**

China Nest Eggs

Best grade Opal Eggs. Weight per doz., ¼ lb. **Price, 3 for 10c; 12 for 35c**

Lime Nest Egg

These are superior to the China egg as they are not so cold, which is better for the hens. They are also indestructible. Weight per doz., 2 lbs.

Price, each, 5c; doz., 40c; postpaid, each, 10c

LICE-PROOF PERCH SUPPORT

A cast iron Roost Support that is strong and durable. The oil cup effectually prevents lice from passing between the roosts and the house. Use *Lee's Lice Killer* or kerosene.

Weight each, ¼ pound.
Price, each, 20c; pair, 35c; doz., $2.00

THE "ALL-RITE"

Sanitary Fountain and Feeder.

For water, grit, chick food or grain, using ordinary Mason jar, either quart or half gallon. Has galvanized pan that is quickly detachable. The best fountain of this type.

PRICE, one size only, without jar, weight, ½ lb. each.

Each, 20c; doz., $2.00

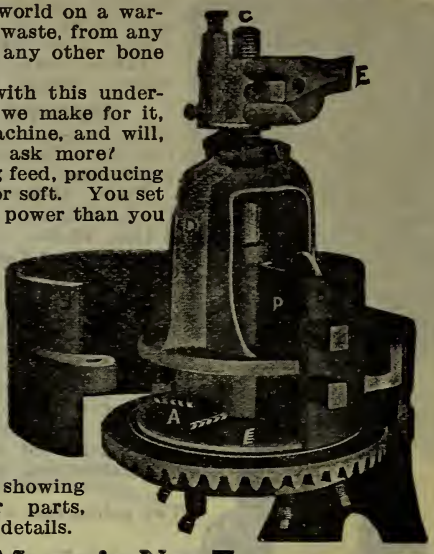
MANN BONE CUTTERS

The Only Bone Mill That Will Cut Both Green and Dry Bone. Will Not Clog.

THE Mann's Green Bone Cutter is offered to the poultry world on a warranty to produce a perfectly edible poultry food, with no waste, from any lot of green bones, with less labor and less annoyance than any other bone cutter.

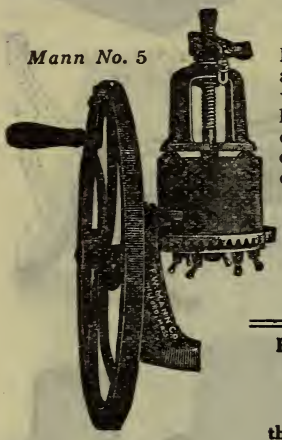
We send the **Mann's** to any responsible poultryman with this understanding; if you are not satisfied that it meets every claim we make for it, notify us, and we will give you instructions to return the machine, and will, upon receipt of same **refund purchase price.** Could you ask more?

The Mann's is the only machine which has a self-governing feed, producing uniform pressure against the knife, whether the bone be hard or soft. You set the machine to suit your strength, and it never requires more power than you set it for.



Mechanism of the Mann's showing automatic force-feed, cylinder parts, etc. Mann's catalog gives all details.

Mann's No. 5



Mann No. 5

Has four knives, large solid cylinder, and has the latest patent automatic governing spring feed which makes it one of the best low-priced bone cutters ever offered. We can furnish with crank, balance wheel, or mounted on iron stand. (See cut.)

Fresh Cut BONE Is the FOOD that makes HENS LAY

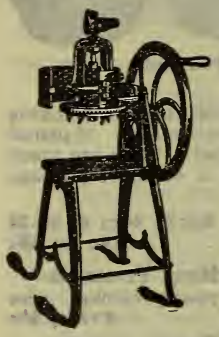
Interesting Booklet "BUGS and WORMS" FREE

Mann's No. 7

The New No. 7 is mounted on a strong iron stand, and has patent automatic governing spring feed. Large, open-hinged cylinder, giving instant access to all working parts, has six knives, gear guard, anti-clog device, heavy balance wheel and other improvements. (See cut.)

Mann's No. 7½

Adapted to run either by hand or power without any change. The particular advantage of the 7½ is that while it is a complete power machine, it can be operated by hand just as easily as the No. 7. It is recommended even if you have no power at present, for should you get power in the near future, you need be at no further expense. It has all the improvements. It meets a long-felt want.



Mann's No. 9

Mann's No. 9

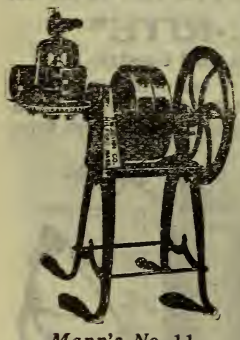
About the same as No. 7, except that it has a larger cylinder and greater holding capacity, different design and larger table.

Mann's No. 11

The No. 11 is exactly the same as No. 9, with the power parts added. It has all the latest improvements. Capacity, 100 pounds per hour.

Mann's No. 12—Power

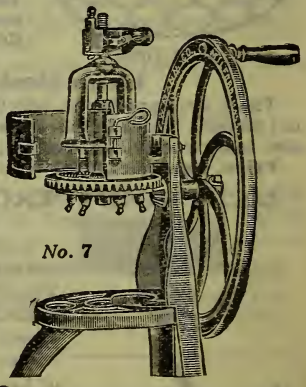
Strictly a power machine, and full of business from top to toe. Capacity, 120 to 150 pounds per hour. Horsepower required, one to two. Just the machine for marketmen, extensive breeders, or anyone who has large quantities of bone to cut.



Mann's No. 11

Price List of Mann's Bone Cutters

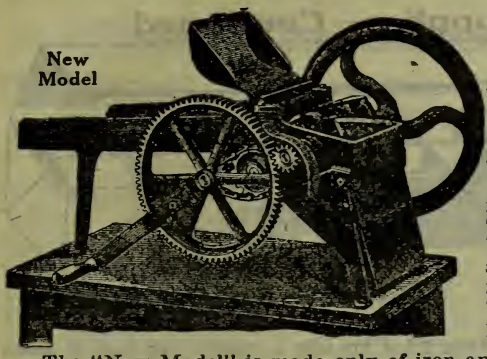
New Styles		Price	Wgt
No. 5C	(with crank handle)	$8.25	30
No. 5B	(with balance wheel)	10.50	55
No. 5BM	(B. W. and iron stand)	14.00	80
No. 7	(B. W. and iron stand)	16.00	107
No. 7½	(hand or power)	21.50	150
No. 9	(B. W. and iron stand)	24.00	163
No. 11	(power machine)	34.00	215
No. 12	(power machine)	39.00	260
No. 15	(power machine)	72.50	420



No. 7

MANN'S HANDSOME 40-PAGE CATALOG

Is fully illustrated and tells all about the different style Green Bone Cutters, Clover Cutters, Corn Shellers, Grit Smashers, etc., and contains much valuable information. Free on request.


New Model

"New Model" Clover Cutter

The "New Model" Clover Cutter is designed for cutting, either green or dry, such growths as clover, alfalfa, vegetable tops, etc., into ⅛-inch lengths. These growths are the cheapest and most productive egg-forming poultry foods for cold weather.

The feature that gives the "New Model" easy supremacy over similar machines is the cutting mechanism. The machine can be kept in perfect order at all times, because the cutter bar is adjustable and easily accessible, and the four 7-inch spiral steel knives can readily be removed for sharpening. Those who are familiar with "ordinary" cutter construction will appreciate these improvements.

The "New Model" is made only of iron and steel, from entirely new patterns, it is a strong feeder, has large capacity, runs unusually easy and will do perfect work indefinitely. Length over all, 28 ½ inches. The machine is intended to be mounted on a box or bench at any height to suit the operator. Weight, 60 pounds..... **Price, $10.50**

Mann's Clover Cutter

Made entirely of iron and steel; cannot warp or shrink. It cuts any kind of hay or clover, either dry or green, and more rapidly than any other make. Each revolution of the balance wheel produces twelve cuts. Do not buy a clover cutter until you have seen Mann's.

Price, $11.00; mounted on iron stand, $12.75

Mann's Clover Cutter Mounted

Wilson's Mill No. 1

Wilson Dry Bone Mill No. 1

This is a practical mill, grinding all kinds of shell, crockery, grit, burnt or dry bone, feed, etc. Instantly adjusted to grind coarse or fine. Every poultry keeper should have one of these mills. You will find them very convenient and serviceable. Weight, 33 pounds. Diameter of hand wheel, 20 inches.

Price, $5.00

Wilson Mill No. 0

A family grist mill in itself. Especially made for grinding flour, corn meal, spices, coffee, etc., for table use. It can also be adjusted for cracking grain. Capacity and size same as No. 1; hopper round. Weight, 30 pounds. **Price, $5.00**

Mann's Corn Sheller

Best low-priced corn sheller made. A profitable tool if you have corn to shell. Weight 10 lbs.

Price, $3.00

Bond's Grit Machine

Will break rock, limestone, ore, crockery, glass, dry clam and oyster shells, etc. A boy of seven can work it. Drop the material in the top and work lever up and down quickly, but not with great pressure. Do not use green bone or wet oyster shells, but dry them. Weight, 25 pounds.

Price, $4.25

Mann's Cast Iron Mortar

For breaking glass, crockeryware, oyster shells or other dry substances for poultry. Weight, 33 pounds; height, 12 inches; 9 inches square; pestle 4 feet long.

Price, $3.50

Black Hawk Corn Sheller.

Ball bearings, easily set for any size corn. Weight 14 lbs. **Price $2.50**

Black Hawk Grist Mill.

For family and poultry keepers' use. Grinds or cracks small grain, corn, beans, peas, etc. All bearings chilled, grinding plates, made of hardest and strongest metals. Extra long crank handle. Weight 17 lbs. **Price $3.00**

Apache Grist Mill.

Larger and heavier than the BLACK HAWK. Fitted with large fly wheel, ball bearings and both holes and slots for fastening to table or bench. It will grind a quart of table meal in two minutes. Weight 21 lbs. **Price $5.00**

Wire Netting for Poultry Runs, Trellises, Etc.

No. 20 Wire, in rolls 150 feet long, in the following widths:

	12-in.	18-in.	24-in.	30-in.	36-in.	48-in.	60-in.	72-in.
2-inch mesh	$1.05	$1.60	$2.10	$2.65	$3.15	$4.20	$5.25	$6.30
1-inch mesh	2.15	3.25	4.20	5.25	6.50	8.40	....	....

Short lengths, 2-inch mesh, **1c sq. ft.**; 1-inch mesh, **3c.** Prices subject to change without notice.

"Union Lock" Netting

Union Lock "Square Mesh" Poultry Netting.—Made of two strands of No. 20 wire run horizontally with No. 19 steel wire vertical strips every three inches, the first seven cables 1¼ inches apart; the next six are two inches, and all above are four inches. This makes the fence tight at the bottom, where needed for small chicks. This fence will fit any uneveness of ground, and because of its strength and construction requires no top or bottom rail and only half as many posts as ordinary wire netting.

Price, per Roll.

12-inch, 165 feet to the roll	$2.00	48-inch, 165 feet to the roll	$5.10
18-inch, 165 feet to the roll	2.55	60-inch, 165 feet to the roll	5.90
24-inch, 165 feet to the roll	3.30	72-inch, 165 feet to the roll	6.80
36-inch, 165 feet to the roll	4.20	**Galvanized Staples, per lb.**	10c

Miscellaneous Poultry Supplies—Continued

KANT-KRACK FOLDING EGG BOX

PORTLAND SEED CO. PORTLAND OREGON

Kant-Krack Egg Box is specially designed for the safe delivery of valuable eggs for hatching and is a great favorite with poultrymen.

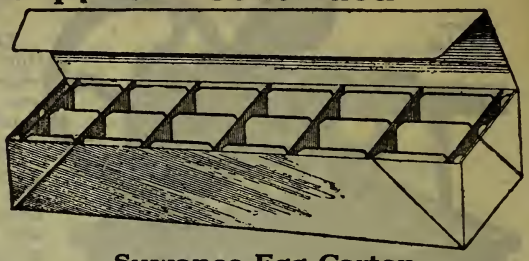
Made of heavy corrugated paper. Only a few seconds' work to set the box up, pack it with eggs, and address it. These boxes are light but very strong, being firmly braced, and will stand the weight of several hundred pounds without crushing.

No.	Size	Weight	Each	Six	Dozen
3	15-Egg	1 lb.	$0.15	$0.80	$1.50
4	30-Egg	1½ lb.	.25	1.25	2.35
5	50-Egg	2 lb.	.40	2.00	3.25

Ideal Paper Egg Boxes

Intended for use in delivering eggs to private families. If you have a "select" egg trade, you should use this box. Nicely printed with a blank space for your name and address. Printed to order in two M. lots at no extra charge. They ship "knocked down" at very low rates. Weight 12 lbs. per 100.

PRICES: 1-dozen size, 20c dozen; $1.00 per 100; $9.00 per 1000. Sample box by mail, 5c



Suwanee Egg Carton

Saves Breakage, Folds Flat

When filled fits into a regular egg case, 3 dozen in a layer.

Every man in the egg trade should use the Suwanee Egg Carton.

A light but strong carton, holding one dozen eggs, and **built to fit a regular egg-packer.** Throw away your "fillers." Use this carton; packs three to a layer in an ordinary egg case, and is always ready for delivery. **Saves handling--saves breakage.** Built with double walls. Ask for sample. Weight with fillers, 3 ozs. each.

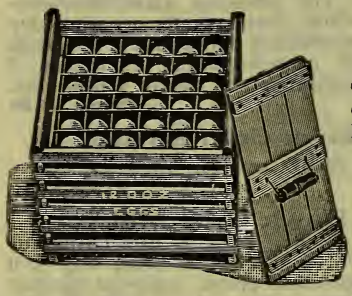
Price: Doz, 25c; 100, $1.25; 1000, $10.00

ADVERTISE YOUR EGGS.—In lots of 10,000 cartons we will print your name or any announcement you want to make at the rate of **50c** per 1000

S. S. Co.'s Shipping Coops

All wood, neat, very light, but strong. Poultry raisers selling poultry at fancy prices should always use these coops.

		Weight	Nailed	K. D.
No. 1.	10x21x18	10½ lbs.	**Each, 35c;**	**6, $1.90**
No. 2.	10x24x20	11½ lbs.	**Each, 50c;**	**6, 2.75**
No. 3.	20x24x20	18½ lbs.	**Each, 60c;**	**6, 3.35**



The "Humpty Dumpty"

"Humpty Dumpty"

The best, the cheapest, the most convenient **EGG CARRIER.** The "Humpty Dumpty" is light but strong, being almost indestructible. Can be folded flat for shipping empty. The most satisfactory egg carrier. Holds 12 dozen. Weight with fillers, 7 lbs.

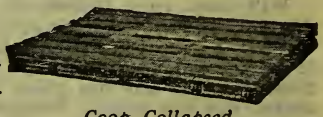
PRICE: Each, 75c; per 6, $4.00; doz., $7.00

Egg Cases

30-dozen case with pasteboard fillers..... **$0.40**
Pasteboard fillers for 30-dozen case. Weight, 3 lbs..... **.20**
Pasteboard fillers, per case (for 12 30-dozen cases)..... **1.80**

Collapsible Poultry Coops

These are the neatest, lightest and strongest coops for shipping poultry that we have ever seen. They are well made, and will last for years. Easily cleaned and stored. They are up-to-date coops, and make a good impression. They are a mighty good investment for any poultry raiser. Coops are made in three sizes. All treated with oil. Order a sample coop.



Coop Collapsed

Coop Set Up

No. 1 Coop. For 12 to 24 chickens, size 36x24x12, weight, 23 pounds **Price, $2.35**

No. 2 Coop. For 24 to 36 chickens, size 48x30x12, weight, 33 pounds. This is the favorite size. **Price, $2.75**

No. 3 Coop. For turkeys and geese; will carry 250 pounds of weight. Size 48x30x16. **Price, $3.00**

Hydro Safety Lamps

Oakes.—Made especially for incubators and brooders; has a water jacket and is perfectly safe.

No. 1—Small Size, ¼-inch wick, weight ¾ lb. **Each, $1.00**

No. 2—Medium size, 1-inch wick, weight 1 lb. **Each, $1.50**

No. 3—Large size, 1½-inch wick, weight 1¼ lbs. **Each, $1.75**

Caponizing Instruments

The demand for capons exceeds the supply, the price per pound averaging more than twice as much as that paid for ordinary roosters.

S. S. CO.'s STANDARD, the best low priced set. **Price, postpaid, $2.00**

WIGMORE, a first-class outfit with book of instructions. **Price, postpaid, $2.50**

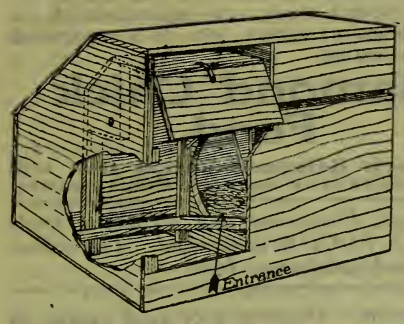
FULL DETAILS OF THE MANY ADVANTAGES OF THE LEE INCUBATORS AND BROODERS ARE GIVEN IN THE LEE BOOKLET. SENT FREE ON REQUEST.

POINTS OUT THE DRONES

The Success Automatic

PROTECTS THE LAYER

Combined, Designating, Laying, Hatching and Trap Nest



Every poultryman knows the value of a Trap Nest. The trouble has been to get a satisfactory one. We offer the **"Success"** and will welcome your criticisms and inquiries. Descriptive pamphlet on request.

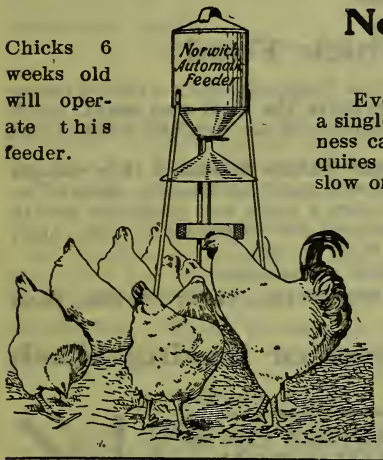
The "Success" Trap Nest automatically separates the laying hens from the non-producers. Works without attention or care from you. Shows "Who's who" in your hen yard, and you do not have to watch the hen. She releases herself. No other trap nest gives this advantage.

By the simple turn of a Screw Hook, the "Success" can be converted into a regular trap nest that will hold the hen until released.

For setting hens, the Success Nest is the perfect one, as it cannot be occupied by more than one hen at a time.

PRICES: No. 2—Two nests, **$3.75; No. 3**—Three nests, **$5.25; No. 4**—Four nests, **$6.75.**

Chicks 6 weeks old will operate this feeder.



Norwich Automatic Exerciser and Feeder

Every kernel of grain put into this feeder will go to your flock, not a single one will be wasted. Absolutely bird and rat proof. Rain or dampness cannot affect it. Saves its cost in 90 days by preventing waste, requires no attention except filling of hopper when empty. Adjustable for slow or fast feeding.

This is the most successful and practical automatic feeder ever invented; the slightest "peck" on the bait bar scattering the grain in the litter in a wide circle, where all the fowls have ample opportunity to **"scratch for it,"** affording just the right amount of exercise. **Keeps them busy all the time.**

Guaranteed to improve the flock, increase the egg production and save feed. Descriptive pamphlet on request.

MADE OF HEAVY GALVANIZED IRON.

	Each
No. 1— 8 quarts	**$3.00**
No. 2—14 quarts	**3.75**
No. 3—20 quarts	**4.75**

Breeders' Magic Egg Tester

The Manufacturers Challenge —

Any person in the world to hatch one egg the Magic Egg Tester registered unhatchable before incubation. No light. No electricity. No expense and lasts a life-time. Demonstrated at Poultry Shows everywhere. Sold by dealers and agents in every country on the globe. This simple, but wonderful instrument, **shows the best and strongest hatchable eggs before incubation.** Selects the eggs which will absorb heat and moisture alike; rejects the inferior ones, and shows correct moisture throughout the hatch. **Price, each, $2.00**

Don't set another egg until you have a Breeders' Magic Egg Tester.

EGG BOXES FOR PARCEL POST

The Boxes offered below are Substantial, Light, Safe and Serviceable They Pack Flat for Returning Empty

This shipping package is so constructed that each egg is separated by a thickness of corrugated board and the entire contents are surrounded by a double wall of air-cushioned corrugated board. Absolute protection is therefore assured, as the box possesses sufficient strength and durability to stand the usual rough handling in transit. Their extreme light weight, when compared with other packages, will in many cases, save the postage for an extra pound. Fold flat for shipment.

For shipment in Zones each egg must be wrapped in cotton, excelsior, newspapers, tissue paper or material of similar nature when shipped in these boxes, and box so wrapped that nothing can escape from the package. Any commercial wrapping paper is acceptable.

PRICES

	Size	Packed	Per Doz.	Per 100	Wt. Per 100
1 doz.	7 ⅝x5 ⅝x2 ⅝	2 doz. per bdl	$0.75	$ 5.00	40 lbs.
2 doz.	7 ⅝x5 ⅝x5 ¼	2 doz. per bdl	1.10	7.50	78 lbs.
3 doz.	7 ⅝x5 ⅝x8	2 doz. per bdl	1.65	12.50	104 lbs.
5 doz.	9 ½x7 ⅝x8	1 doz. per bdl	2.15	16.00	158 lbs.

LIVE CHICK BOXES

25 Chick size, each, 15c; doz. $1.60; 50 Chick size, each, 25c; doz., $2.60. 100 Chick size, each, 35c; doz., $3.60

Our Live Chick Boxes for Delivering Day Old Chicks are Safe, Economical, Convenient

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For Mailing Boxes of all kinds and sizes write for our FREE booklet, *"Parcel Post Packages"*

Spokane Seed Co.'s "Diamond Quality" Poultry Foods

WE manufacture our **Diamond Poultry Foods** from choice, clean, wholesome material, and they are the result of a lifetime of careful study and experiments by a thoroughly practical expert, who is a recognized authority on feeding.

Diamond Chick Food

A Properly Balanced Ration that will make chicks grow and keep them healthy

For Young Turkeys, Pheasants and all young fowls DIAMOND CHICK FOOD is unexcelled. The safest, most dependable and satisfactory food.

Our trade mark on every original package is your protection. Demand it of your dealer, as there are many dangerous substitutes.

The Making of Diamond Chick Food

The select grains that are used in the preparation of Diamond Chick Food are cut by a special proces screened to a **unlform size** and **run through a Fanning Mill** to **remove the dust and meal,** which is the fatal element in **most Chick Foods.** After this process the ingredients are carefully weighed and mixed in correct proportions. **No guess work.**

By using Diamond Chick Food you are giving the chicks just **what Nature intended they should have,** a food composed of grains (cracked), small seeds, bone, dried sweet meat (to take the place of insects and bugs), charcoal, etc., mixed in the right proportions to produce a quick and profitable growth without loss. It's so convenient, so handy, always ready for use, and you can raise so many more chicks by feeding it that it is the **cheapest food you can buy.** A trial is all we ask.

Ask for descriptive pamphlet—Directions for feeding in each sack or package.

PRICE: 5 lbs., 25c; 12 lbs., 50c; 25 lbs., 90c; 50 lbs., $1.60; 100 lbs., $3.00

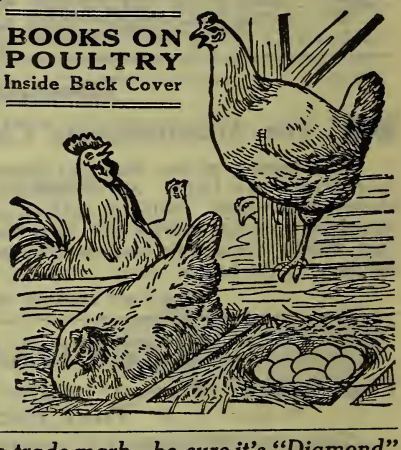
Spokane Seed Co.'s Diamond Egg Food or Laying Mash

Makes hens lay when eggs are high; keeps poultry healthy.

Unequaled for feeding young chicks.

A complete ground food to be fed dry or wet. Starts hens laying and **keeps them at it.** Hastens moulting. Puts poultry in prime condition. Makes young fowls grow fast. **No Drugs--No Stimulants--**but a rich, wholesome, nourishing food for growing fowls and hens, encouraging rapid growth and increasing egg production. Can be fed dry or as a mash. And is the most successful combination of egg producing elements. **Put up In 90 lb. Bags. Full Weight.**

PRICE: Per lb., 3c; per sk., $2.10



Diamond Scratch Food

The most successful "up-to-now" ready-mixed complete food. Makes hens sing, and singing hens lay. A perfect "working ration" for fowls. Grains, Beef, Bone and Charcoal carefully prepared in the correct proportion; a veritable "hen's delight," and a great egg-producer.

PRICE: Per lb., 3c; per 100 lbs., $2.35

High Grade Meat Scraps

DIAMOND BRAND, SPECIAL.—A new meat product, perfectly prepared, fine ground and clean. The highest feeding value yet produced.
PRICE: 4 lbs., 25c; 50 lbs., $2.25; 100 lbs., $4.00

STEEL CUT.—Granulated, clean and free from dust, hide, hair, etc. There is no waste; can be fed like grain if preferred. Every poultry keeper knows the value of this food.
PRICE: 5 lbs., 25c; 50 lbs., $2.00; 100 lbs., $3.75

Fish Scrap

Made from sweet, clean Halibut. A high grade poultry food, rich in protein (65%) relished by fowls—furnishing a clean, healthy meat ration. No chemicals or acids used in its manufacture, and it is free from meal and dust.

PRICE: Per lb., 5c; 100 lbs., $3.75

Look for the trade mark—be sure it's "Diamond"

Diamond Growing Food

Our special formula for promoting a rapid, healthy growth, and should be fed after the third or fourth week; nothing else needed; will quickly produce large, plump "Broilers."

PRICE: Per lb., 3c; 100 lbs., $2.70

Diamond Pigeon Food

This special combination for pigeons is unequaled for squab raising, feeding for exhibition or as a regular working ration.

PRICE: Per lb., 3c; 100 lbs., $2.85

Fish Meal

A fine-ground, pure, sweet fish meal, containing 65% protein—feed as you would meat meal; a rich, wholesome food for poultry.

PRICE: Per lb., 5c; 100 lbs., $3.75

Prices subject to Change without Notice—no Premiums allowed on Poultry Foods

Spokane Seed Co.'s Diamond Poultry Foods—Con'd.

High Grade Meat Meal

A highly concentrated food. Being cooked meat, dried and ground. Very rich in protein. It should be mixed with the soft food. No hides or tankage in our meat meal, but, as its name implies, meat, cooked, dried and ground; unexcelled for egg-production.

DIAMOND GRADE.
1 lb., 10c; 10 lbs., 50c; 100 lbs., $4.00

STANDARD.—Good grade. **100 lbs., $2.75**

Grit

Every poultry raiser should keep a supply of grit in each pen. Made in two sizes, chick and hen size. We always send hen size unless otherwise ordered.

DIAMOND MICA.
PRICE: 5 lbs., 10c; 100 lbs., $1.00

Charcoal

Our Charcoal is guaranteed, prepared especially for poultry; no dust; a good thing for bowel trouble, sour crop and indigestion; a health preserver.

PRICES: 1 lb., 10c; 10 lbs., 50c; 100 lbs., $3.00

Granulated Bone

Our **"Diamond Brand"** is made from selected hard white raw bones, and of a superior quality; an indispensable food for laying hens.

DIAMOND. PRICE: 10 lbs., 35c; 100 lbs., $3.00

STANDARD. PRICE: 100 lbs., $2.50

Blood Meal

The most highly concentrated egg-producer on the market. To be fed in soft food. Unexcelled as a food for forcing growth of chicks or as an egg food.

DIAMOND. PRICE: 1 lb., 10c; 10 lbs., 60c; 50 lbs., $2.75; 100 lbs., $5.00

Oyster Shells, Crushed

We offer nice clean stock, free from dust and waste. These should be within reach of your hens at all times. In two sizes: coarse and fine.

DIAMOND. PRICE: 5 lbs., 10c; 100 lbs., $1.50

STANDARD POULTRY SHELL.—A very good grade of mixed sea shell—sold by some dealers as oyster shell—but is not so good and has more waste. **100 lbs., $1.00**

Bird Seed

Not for planting. Special Prices in Quantity.

S. S. Co.'s Best Mixed...Per lb., postpaid, 20c
Canary, best re-cleaned.Per lb., postpaid, 20c
Hemp.....Per lb., postpaid, 20c
Millet.....Per lb., postpaid, 20c
Rape.....Per lb., postpaid, 20c
Cuttle Bone, large bone.....**Postpaid, 2 for 5c**

Tobacco Dust

For use in dust baths and nests. A cheap and effective exterminator of lice.

PRICE: 1 lb., 10c; postpaid, 20c; 100 lbs., $5.75

Alfalfa Meal

The best substitute for green food for Winter feeding; helps keep the egg basket full; mixed with the soft feed is good for large or small chicks; endorsed by leading experts.

PRICE: 1 lb., 5c; 10 lbs., 30c; 100 lbs., $1.60

Alfalfa Leaves and Blossoms

PRICE: 1 lb., 5c; 10 lbs., 30c; 100 lbs., $2.00

Poultry Pepper

A good tonic and invigorator; ground.
PRICE: 1 lb., 25c; 5 lbs., $1.00

Diamond Poultry Remedies

These are manufactured exclusively by us and we fully guarantee them

DIAMOND POULTRY DIP.—Certain eradicator of insects and disease on all animals. Insures healthy conditions. A general disinfectant and cleanser. Kills cockroaches, water bugs, ants and all insects. Cures gapes, bumble foot, chicken pox, scaly legs, etc. Keeps your yards and houses sanitary. **One gallon makes 100 gallons.**
PRICES: Qts., 50c; doz., $5.00; half gal., 85c; gal., $1.50; doz., $14.50. Mailing wts., qt., 3 lbs.; ½ gal., 5 lbs.; gal., 10 lbs.

DIAMOND MICROZONE.—Will cure Roup, Cholera, Swelled Head, Sore Eyes, and most all Chicken Diseases. Every poultry keeper should have a bottle of this on hand. Liquid, cannot be mailed. Wt., pkd. 3 lbs. **Price per bottle, 50c**

DIAMOND CHOLERA CURE.—Comes in powder form. Soluble in water. **Postpaid, 50-**

DIAMOND ROUP CURE.—Comes in powder form. **Postpaid, 50c and $1.00**

Lambert's Lice Remedies

DEATH TO LICE.—
5 oz., 10c; 15 oz., 25c; 48 oz., 50c; 100 oz., $1.00

DEATH TO LICE--SPECIAL.—Dissolve in kerosene. **4 oz., 10c; 16 oz., 25c**

DEATH TO LICE OINTMENT.—For lice on chicks, scaly shanks on fowls of any kind.
1 oz., 10c, postpaid; 3 oz., 25c, postpaid

550 CHICKS FROM 600 EGG "MANDY LEE"

February 23, 1915.

Langendorfer Bros., Poultry Raisers, Vancouver, Wash., write:

Have raised 25 varieties of land and water fowl, using "Mandy Lee" Incubators exclusively, and have just taken off a hatch of 550 from a 600-egg capacity "Mandy Lee," also 71 ducks from 80 eggs. We operate four 600 and a number of 140 and 300-egg sizes. We have successfully run this machine with goose, turkey and bantam eggs. At the Oregon State Fair, from 71 birds on show 64 prizes were secured. At Gresham, North Yakima, Chehalis, and Canby shows, they were winners, but did not exhibit at the Oregon State Poultry Show at Portland, owing to the season, as pens had been made up.

Miscellaneous Poultry Supplies

Leg Bands For Poultry and Pigeons (See Cuts)

Every chicken must have a leg band on before it can be entered in a poultry show. In ordering **Leg Bands, be sure to state size wanted, or breed of fowls** bands are to be used on, and **number wanted for males or females.**

Eclipse

Double Clinch

Smith Sealed

Leader Band

DOUBLE CLINCH.—A new band, very safe; no exposed corners, ends or loops; has double fasteners.
Prices, postpaid, 12 for 15c; 25 for 30c; 50 for 50c; 100 for 75c.

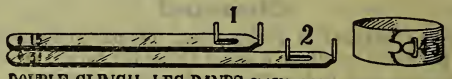
SMITH SEALED.—Of aluminum and so constructed that by simply crushing a soft rivet they are sealed on the bird's leg, and must be destroyed to be removed. See cut.
Prices, postpaid, 12 for 25c; 25 for 50c; 60 for $1.00; 100 for $1.25.

PIGEON BANDS.—We can supply the **Double Clinch and Open Band**—you simply clasp it on—at price of **Double Clinch.**

SMITH SEALED--Pigeon.--Doz., 30c; 100,$1.50

ECLIPSE.—Flat aluminum banks, no sharp corners or edges; easiest flat band to put on.
Prices, postpaid, 12 for 20c; 25 for 35c; 50 for 60c; 100 for 85c.

LEADER.—Latest and best adjustable leg band out. Has neat, compact, and smooth fastening, with no catching points; easily attached and is absolutely secure.
Prices, postpaid, 12 for 15c; 25 for 30c; 50 for 50c; 100 for 75c.



DOUBLE CLINCH LEG BANDS PIGEON SIZES

Colored "LEADER" Leg Band.—Adjustable, will fit any fowl, the colors are of celluloid in metal protecting band. White, Pink, Red, Blue, Yellow, Green and Brown. Can be furnished numbered 1 to 100 with the words, First, Second, Third, Fourth or Champion.

Price, 12, 35c; 25, 60c; 50, $1.10; 100, $2.00; 250, $4.50; 500, $8.50; 1000, $16.50

Smith Sealing Tool

Made especially for sealing the Smith leg bankds.
Plain jaw, 50c; lettered jaw, any letter, 75c, postage, 10c.

Reliable Poultry Marker

For marking the web between the toes. One of the best and handiest markers. **Postpaid, 35c**

Poultry Killing Knife

French, best and most popular.
Price, postpaid, 50c

Petty's Poultry Punch

Latest, most convenient Poultry Punch; can be put on a key ring or used for a watch charm. Will not clog. Thoroughly practical.
Price, postpaid, 25c

THERMOMETERS

For Incubators--Tested

Fig. 8.—Cornell Style.....**$1.00**
Fig. 6.—S. S. Co.'s triangle shape; metal back..... **.75**
Fig. 10.—S. S. Co.'s Straight Metal back... **.60**
Fig. 14.—Triangle shape; best incubator Thermometer made. Certified correct; worth the additional cost..... **1.00**
Mandy Lee style..... **.75**

For Brooders

Fig. 12.—Peep O'Day.....**$0.65**
Fig. 2.—S. S. Co.'s; for any style brooder... **.50**
Mandy Lee style..... **.50**

For General Use

Cabinet.—8-inch wood back, nice finish..... **.40**
Fig. 4.—Household, 7-inch, black enamel, tin case..... **.25**

Mandy Lee Tester

Fig. 1.—S. S. Co.'s Self-Registering—A necessity for Greenhouse and Poultrymen. Will accurately register the extremes of heat and cold.
Price, postpaid, securely packed, $4.00

Fig. 3.—Hotbed Thermometer, for plunging in the bed to know when the temperature is right for planting. This knowledge may save much loss and delay.
Each, postpaid, $2.00

The Wilder Illuminated Thermometer

Instantly indicates the temperature without opening doors. So simple that a child can attach it to incubator.

Everyone who owns an incubator knows how hard it is to read the thermometer correctly through the glass doors, and it is not always advisable to open them. But with the "Wilder" you simply press the button and the temperature is plainly indicated. Where several incubators are running, wires can be so placed that a single battery is carried and plug inserted for readings. Batteries and parts can be replaced at small cost if broken or exhausted. Wilder thermometers are absolutely dependable and are fully guaranteed.....**Price, each, $2.75**

Mandy Lee Egg Tester

This Egg Tester is made to use on a lamp and will fit the ordinary No. 2 burner. The same tester is furnished with all Lee Incubators.....**Price, 50c, postpaid**

REMEDIES, LICE KILLERS, ETC.

Lee's Foods and Remedies for Stock and Poultry

THE GENUINE MERIT of the LEE FOODS and REMEDIES and their recognized superiority is their best guarantee, and you can depend upon them absolutely to do all that is claimed for them. The valuable booklets of the Lee Company are free to poultry keepers and stockmen, and contain reliable and complete information to date on poultry and stock feeding problems. **We mail them on request.**

Lee's Lice Killer—For 20 Years the Standard

LIQUID.—Destroys either by vapor or contact. No trouble to apply; just paint the roosts or wall at night. Rids poultry and houses of all vermin; is prepared exclusively for this purpose, and there is nothing just as good.

PRICE: Qt., 35c; ½ gal., 60c; 1 gal., $1.00; 5 gal., $4.00.

GERMOZONE

—the biggest seller in poultry medicine on the market, and has value that cannot be determined in dollars and cents. Hot weather breeds cholera, bowel complaint, and numerous other diseases so common and fatal to chicks. Regular use of Germozone insures BETTER health; BETTER chicks; BETTER layers; and the RIGHT kind of BREEDERS.

Use it for Bowel Complaint in little chicks; for Cholera, Roup, and other diseases among the older fowls; and regularly TWICE-A-WEEK for ALL fowls. It prevents contagion, tones the system, and insures BETTER health for the entire flock.

PRICES.

Lee's Germozone.	Liquid.	**12-oz. bottle**	**50c**
		32 oz.	**$1.00**
Lee's Germozone.	Tablets.	**Pkg., postpaid**	**50c**

If you have never used Germozone get a package at once. It will prove the most profitable investment you have ever made and you will never again be without it.

LEE'S EGG MAKER is not a tonic nor a medicine, but a meat food of great value. It will make hens lay, chicks grow, and keep them all in a healthy, vigorous condition.
2-lb.pkg.,25c; 5-lb.pkg.,50c; 25-lb.pail,$2.50

LEE'S HEADLICE OINTMENT.—For little chicks. **Large box, 15c**

LEE'S INSECT DESTROYER.—(Powder)
1 lb. can, 25c; 3 lb. can $1.00

LEE'S WHITE DIARRHOEA REMEDY.—The best medicine for this dangerous disease of little chicks. **Wt., 2 lbs.; 12-oz. bottle, 50c**

LEE'S HOG REMEDY.—Cures all diseases of hogs and keeps them healthy.
Pkg., 75c; 25-lb. pail, $2.00
Mailing weight, 9 lbs.

LEE'S CARBOLIC SHEEP DIP.—For lice, ticks, mange, itch or scab, on cattle, sheep and hogs.
Qt., 50c; ½ gal., 75c; gal., $1.25; 5 gals., $5.00
Mailing wts., qt., 3 lbs.; ½ gal., 5 lbs.; gal., 10 lbs.

LEE'S WORM POWDER.—For horses, cattle, sheep and hogs. Safe and sure in result.
Pkg., 25c, weight, 1¼ lbs.

LEE'S BEST CONDITIONER STOCK FOOD.—Promotes good health, digestion and assimilation.
25c pkgs., wt., 3 lbs.; 50c pkgs., wt., 8 lbs.; 25-lb. pails, $2.50.

LEE'S PEERLESS GOPHER KILLER. — For killing gophers, squirrels, etc. Sure death.
Quart can, wt., 3 lbs., 75c

LEE'S PEERLESS BUG KILLER.
Wt., pkd., 2 lbs.; 12-oz. bottle, 25c

LEE'S HICKORY SMOKE EXTRACT.—Hickory Smoke Extract applied to meat preserves it indefinitely, imparting the delicious flavor that is only otherwise obtained by smoking with green hickory.
12-oz. bottle, wt., pkd., 2 lbs., 35c; 32-oz. bottle, 75c.

LEE'S FLYO-CURO.—We sell thousands of cans of this fly spray every season, and it gives good satisfaction. **Qt., 35c; ½ gal., 60c; gal., $1.00**
Mailing wts., qt., 3 lbs; ½ gal., 5 lbs; gal., 10 lbs.

Thoroughbred Poultry and Eggs for Setting

Send us your orders for Poultry or Eggs, **any breed or strain,** and secure the advantage of expert, critical selection, that guarantees full value for your money. We do not depend on any one breeder, but can give you the pick of the prize-winning strains at right prices.

OUR SPECIAL POULTRY SUPPLY CATALOG lists everything necessary for the profitable production of poultry and contains valuable information on poultry diseases, care and treatment. We want everyone interested in poultry to have this catalog and the **"Mandy Lee" Books. Free.**

DAIRY SUPPLIES

The New Sharples Cream Separator

The New "SUCTION FEED" Sharples

SKIMS CLEAN gives uniform density at any speed!

28 New Features

YOU ARE FAMILIAR with the well-known advantages of the regular Tubular Separator. You know the simple, tube-shaped bowl, with its enormous skimming force (double that of any other machine made)—no discs, easily cleaned, almost indestructible. You know the advantages of having all the gears solidly encased and running in oil. You know how the bowl hangs from a single ballbearing, spinning naturally, instead of being supported from below by two or more "spring" bearings that mean either frequent repairs or a wobbling bowl.

The **"Sharples Special"** *with all these advantages needs only its* **new features** *described here of which the most important is the*

SUCTION FEED

THE MILK is drawn up through the bottom of the bowl by the suction force of the revolving bowl—and the greater the speed the faster the separation—*But at all speeds the New Sharples Skims Clean*—and the cream is of a uniform density—just what you set the cream screw for—and you get *all the cream* at *any speed*—fast or slow—and the faster you turn the greater the capacity. *This is true of no other separator.*

IN EVERY OTHER SEPARATOR the thickness of the cream varies with the speed—and *clean skimming can only be done when the separator is run evenly at a certain speed,* failure to do this resulting in great loss; and it is almost impossible to run a separator at a uniform and certain rate of speed—*time yourself and try it.*

EXTRA LARGE SEAMLESS SUPPLY TANK, lower than on any other separator.
ALL METAL construction—no rubber rings, wood bushings or gaskets.
NO THREADS ON DRAG OR FEED CUP all parts slip together instantly.
AUTOMATIC MILK SHUT-OFF. UNBENDABLE SPINDLE—are only a few of the new exclusive features fully explained and illustrated in the CATALOG OF THE "NEW SHARPLES."

PRICES F. O. B. SPOKANE

No. 2.—Capacity 300 lbs. per hr.....$ 60.00	**No. 4.—Capacity 500 lbs. per hr.....$ 85.00**
No. 3.—Capacity 400 lbs. per hr..... 70.00	**No. 6.—Capacity 700 lbs. per hr..... 100.00**
No. 9.—Capacity 950 lbs. per hr.....$125.00	

We have a few of the Tubular A Pattern **Sharples** Cream Separators on hand to close out at bargain prices. Write us for particulars. These machines do not have the suction feed, low and seamless supply tank, but are the regular pattern machines put out by the **Sharples Co.** until last Fall.

With the exception of the new Suction Feed *Sharples,* there are no better machines on the market.

SHARPLES MECHANICAL MILKER

A practical and successful Milking Machine that does five times the work of human hands, more gently, more carefully and with better effect on the cow. Send for special catalog and let us know how many cows you are milking.

LOUDEN HAY TOOLS

Write for special catalog of Hay Cars, Forks, Slings, Pulleys, etc.—MADE FOR SERVICE.

Babcock Tester—For Testing Milk and Its Products.

The most accurate and best built tester. Case is one solid piece, weighing about 4 pounds. Crank and shaft a single solid piece of steel. Worm spindle and gear solid steel and iron mesh full width. Buckets solid brass. Gear worm runs in oil. Model 8 Babcock Testers are guaranteed perfect in workmanship and material, all are equipped with full set of glassware, bottle of acid and brush. Shipping weight, 15 lbs. Accurate skim milk bottles at 60c each; $6.00 dozen; postage 10c for single bottle.

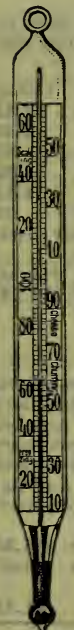
Prices Babcock Testers.

No. 4—2 bottles, milk only.....**$4.25**
No. 5—2 bottles, milk and cream.....**4.75**
No. 6—4 bottles, milk only.....**$5.25**
No. 7—4 bottles, milk and cream.....**5.75**

For 6 to 24 Bottle Inclosed Machines, Write for Prices.

Dairy Thermometers

Floating Dairy. Mercury or red spirit. **Each, 50c**
Floating Churning. 10° to 110°. **Each, $1.25**
Pasteurizing. 30° to 220°. **Each, $1.25**
Quevennes Lactometer, with Thermometer in stem. **Each, $2.50**
Veterinary. **Each, $1.50**
Lactometer. (Milk, per cent scale, New York Board of Health Pattern.) 0 to 20; 2 degrees graduation. **Each, 50c**



Lactodensimeter (Quevenne). Specific gravity scale, 1015 to 1040, 1 degree graduations. **Each, 50c**

Lactodensimeter (Quevenne). Specific gravity scale, 1015 to 1040, 1 degree graduations; with thermometer in top of stem; length, 13 inches. **Each, $2.00**

Glass Jars. Plain glass jars with foot and pour-out for use with sprayometers and hygrometers in testing.
10x2 inches.....**Each, 45c**
12x2 inches.....**Each, 50c**

Graduated Cream Gauge. Graduated 0 to 30 per cent. 9 ½x1 ½ in. **75c**

All thermometers and glassware sent at purchaser's risk of breakage.

Babcock Test Glassware

Milk Bottles 10 %.....	Each	$0.25	Doz.,	$2.50
Cream Bottles 30 %....	"	.30	"	3.00
Cream Bottles 50 %....	"	.35	"	3.50
Skim Milk Bottles.....	"	.75		
Pipettes 17.6 c.c.....	"	.20	"	2.00
Pipettes 18 c.c.....	"	.20	"	2.00
Acid measure.....	"	.15	"	1.50

Sulphuric Acid for Babcock Test, 9 lb. Bottle, $1.00

Chatillons—Spring Balance

Dial in ounces or 10th pounds.

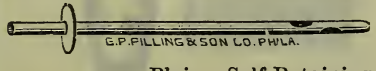
30 lbs.....**$4.00**
60 lbs.....**5.00**
120 lbs.....**8.00**

Test Scales

Torsion Balance, 1 bottle.....**Price, $15.00**
Torsion Balance, 4 bottle.....**Price, 17.00**
Torsion Balance, 12 bottle.....**Price, 25.00**
Torsion Balance, Moisture Test.....**Price, 15.00**

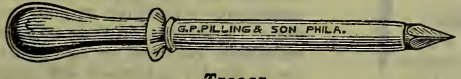
Send for Catalog

Milking Tubes



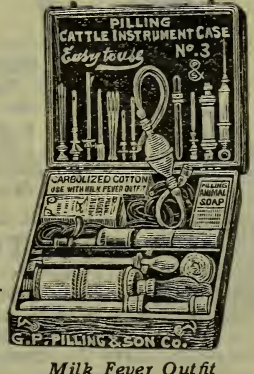
	Plain	Self Retaining
2-inch.....Plated	**25c**	**35c**
3-inch.....Plated	**30c**	**40c**
4-inch.....Plated	**35c**	**50c**

CATTLE INSTRUMENTS



Trocar

MILK FEVER OUTFIT. Pillings.....**Each, $3.00**
GARGET OUTFIT. Pillings.....**Each, 5.00**
TUBERCULOSIS TEST OUTFIT. Pillings for 10 cows.....**Each, 5.00**
CATTLE TROCARS.....**Each, 1.50**
PIG FORCEPS.....**Each, 3.50**
LEAD PROBES.....**Each, 25c**
TEAT EXPANDERS.....**Each, 50c**
TEAT OPENERS.....**Each, 75c**
TEAT BISTOURY—For cutting obstructed teats.....**Each, $1.50**



Milk Fever Outfit

Cement—Seal

A sanitary coating for dairy and creamery walls. Can be used on cement, stone, metal or wood. Pure white. **Price, 1 gal. can, $3.00; 5 gal. keg, $2.90 per gal.; 20 gal. keg, $2.75 per gal.**

Composite Test Jars—Aluminum Top

Price, 2 oz., 50c doz.; $5.00 per gro.

Skimmed Milk Labels

Price, 500, $1.00; 1000, $1.90

Stewart Cow Clipping Machine

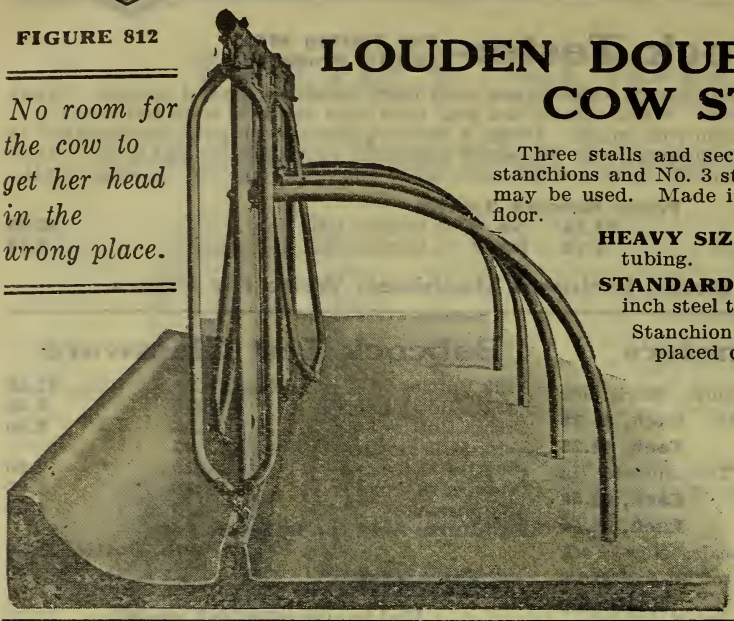
No. 1.....**Price $8.50**

BARN PLANS FREE

The Louden Machinery Company maintain an architectural department which will work over your proposed plan and show you many ways to save space and time in handling your barn work. There are no charges attached to this service. Free barn plan book sent on request.

FIGURE 812

No room for the cow to get her head in the wrong place.



LOUDEN DOUBLE BRACED COW STALL

Three stalls and section, complete with tubular steel stanchions and No. 3 stall partitions—any style partition may be used. Made in two sizes, for wood or concrete floor.

HEAVY SIZE—Made of 1⅞ inch O. D. Steel tubing.

STANDARD SIZE—Made throughout of 1⅝ inch steel tubing.

Stanchion keepers, if preferred, may be placed on the stanchions.

Pre-eminently the strongest cow stall made. Cannot be pushed out of place sideways. Made any width desired and cross braces lengthened or shortened to suit.

PRICES:

No. 812, 1⅞ inch for concrete floor, per head.....**$9.35**

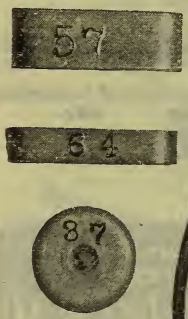
No. 812, 1⅝ inch for concrete floor, per head..... **8.40**

For wooden floors add $1.00 for Flanges.

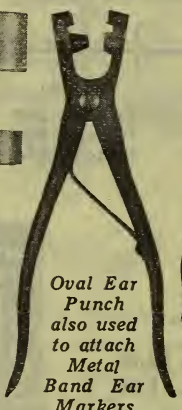
Markers For Cattle, Sheep and Hogs

Metal Ear Labels and Ideal Ear Buttons are satisfactory and easily applied marks of identification that are indispensable to breeders and stockmen.

Your name and address on one side, numbers on the other.



Metal Band Ear Marker and Aluminum Ear Button



Oval Ear Punch also used to attach Metal Band Ear Markers

Punch and Pliers for Aluminum Ear Buttons

Not more than ten large letters can be used on the hog and sheep size; 15 large letters on cattle size, or 22 small ones.

PRICES: Two sizes; Sheep and Hog	Cattle
100 with name and number.....**$1.65**	**$2.15**
50 with name and number..... **1.15**	**1.40**
25 with name and number..... **.75**	**.85**
100 with name only, or number only. **1.25**	**1.65**
50 with name only, or number only. **.85**	**1.15**
25 with name only, or number only. **.60**	**.75**

Wt. for mailing, Cattle size, 2½ lbs. per 100; Sheep size, 1 lb. per 100.

OVAL EAR PUNCHES, Cattle Size; weight, 1¼ lb. each, **$1.65; Sheep and Hog;** size, **$1.25.** Postage, 10c each.

Ideal Ear Buttons

Pure Aluminum Hardened

Medium size, suits all animals, clinches tight, cannot come out; double strength. Name and address on top side; number on bottom, or number and name can both appear on one side if not more than 18 letters and figures; if more than 18, both sides can be used to the limit of 30 letters and figures. Easily attached with special punch and pliers.

PRICES

25, Wt., 3 oz....**$1.25**	**500,** Wt., 4 lbs. **$15.50**
50, Wt., ¼ lb... **1.90**	**1000,** Wt., 6 lbs. **28.00**
100, Wt., ¾ lb... **3.50**	

Punch and Pliers, Wt., 1 lb.....**$1.25**

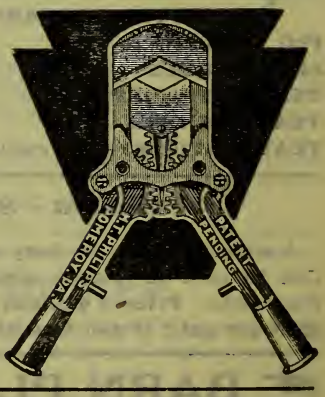
KEYSTONE DEHORNERS

V-shaped Knives give four cutting blades. Endorsed by Colleges and Veterinarians. There is nothing to get out of order. New blades can be fitted in five minutes. You do not have to remove blades for resharpening. Blades are of finest steel, specially tempered. The Keystone **cuts** the horn—there is no grinding. Ask for special literature on dehorning.

PRICES.

Improved Keystone Dehorner, complete with leader, rope, extra sets of blades and screws	**$15.00**
Improved Keystone Dehorner, only	**13.00**
Regular Keystone Dehorner, complete with leader, rope, extra sets of blades and screws	**13.00**
Regular Keystone Dehorner, only	**11.00**
Extra Blades for Keystone, each	**.75**
By mail, 9c extra.	
Blade Screws, per dozen	**.30**

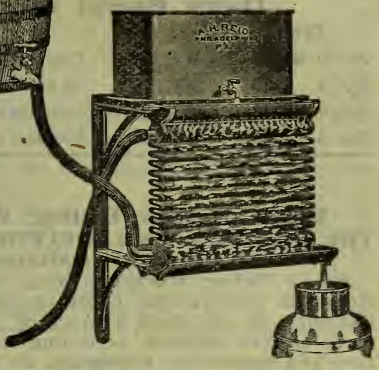
When ordering Blades give number of screw holes in each blade wanted.



We represent the **CREAMERY PACKAGE MANUFACTURING CO.,** makers of all kinds of Creamery apparatus and supplies. Write us for special catalogs. Estimates furnished on complete farm creameries, also complete butter and cheese making plants.

DAIRY SUPPLIES—Continued

Reid Corrugated Milk Cooler and Aerator



REID CORRUGATED MILK COOLER AND AERATOR

The cooler is suspended by the brackets from a wall or post, the cold water enters the cooler at the lower inlet pipe from a barrel or reservoir, flows to the opposite side, then up through the corrugations and passes out at the top.

The milk in the reservoir flows out at the faucet, is distributed by the perforated trough, flows down over the outside of the cooler in a thin film into the can below.

The cooler is hinged at one end, needs not be taken down to wash. Having no sides or ends to the corrugations, and the bottom being removable, there are no corners to clean.

The coldest water is at the bottom, therefore the milk is practically cooled to the temperature of the water when it leaves the cooler. We claim that the **Reid Corrugated Cooler** has more actual cooling surface to the square inch in proportion to the size than any other corrugated cooler. It is absolutely the best on the market.

Our coolers are well made of heavy tinned copper with Removable Troughs.

PRICES.

No. 1 Capacity 45 gallons per hour	15 cows	**Each, $15.00**
No. 2 Capacity 55 gallons per hour	25 cows	**Each, 20.00**
No. 3 Capacity 65 gallons per hour	40 cows	**Each, 25.00**
No. 4 Capacity 80 gallons per hour	60 cows	**Each, 27.50**

Each Cooler is furnished with Milk reservoir, faucet for water barrel, brackets, two troughs and hose.

The capacity of the Corrugated Cooler, as given above, is for milk at the initial temperature of 95 degrees or animal heat.

Bottle Fillers

No. 0 Quaker City—1 bottle. Handy for cream ..... **$ 8.00**

No. 1 Franklin—Low priced and efficient. Fills pints and quarts on same end. 4 bottle. Weight 175 lbs. Without cover **60.00**

No. 1 Franklin—With cover **65.00**

No. 2 Franklin Filler—8 bottle, fills 4 at each end. Without cover **85.00**

No. 2 Franklin—With cover **92.50**

Bottle Washer

Franklin Steam Turbine. Runs with 10 lbs. steam pressure ..... **Price, $25.00**

Brushes

	Each	Doz.
No. 66 Gray bristles, 3 in. diam., for Turbine	$0.35	$3.50
No. 86 Russia bristles 3 in. diam., 10 in. Handle	.45	4.50
No. 72 Black bristles, 3 in. diam., 10 in. Handle	.35	3.50
No. 73 Black bristles, 3½ in. diameter, 10 in. Handle	.40	4.00
No. 67 Gray hair, 3 in. diam., 10 in. Handle	.35	3.50
No. 61 Chinese bristle top, no tuft, 10 in. Handle	.25	2.50
No. 74 Cream Bottle, 2 in. diam.	.35	3.50
No. 08 Can scrub	.50	4.50
No. 47 Can scrub, with handle	.40	3.50
Cooler brush	.35	3.50
No. 36 Babcock Test Bottle Brush	.15	1.50
No. 708 Babcock Test Bottle Brush	.15	1.50

Barn Brushes

	Each	Doz.
No. 286D 4 row 14 in	$0.75	$7.00

Cow Brushes

No. 254	Fibre	$0.50	$5.00
No. 259	Rice Root	.75	7.00

Towers Fish Brand Aprons

Double, oiled ..... **Each, $1.00**
Single, oiled ..... **Each, 90c**

TURBINE BRUSH

Write for Special Catalog of Barn Equipment

Lead Can Seals

A sealed can insures delivery of your milk exactly as it leaves your hands—protects both shipper and dealer.

Tinned Wire, per thousand **$2.00**
Seal Press **2.25**
Lettered jaws for seal press, 50c extra.

EVERY DAIRYMAN Should Know ALL ABOUT

KOW KURE

The Great Remedy for COWS ONLY

SEE PAGE 160.

Tinware. Railroad cans, side handled delivery cans, cream cans, strainers and pails. Write us what you want and quantity for special quotation.

CHURNS

Perfection Jr. Combined Churn and Butter Worker

Special descriptive literature on request

No. 1 Capacity 10 to 60 lbs., weight 300 lbs.....Price.....**$ 70.00**
No. 2 Capacity 12 to 80 lbs., weight 380 lbs.....Price..... **78.50**
No. 3 Capacity 20 to 100 lbs., weight 400 lbs.....Price..... **87.00**
No. A3 Capacity 25 to 150 lbs., weight 450 lbs.....Price..... **103.00**

Dairy Barrel Churns

	Price.			
No. 0	**$4.00**	Wt 30	Capacity	1 to 2 gal.
No. 1	**4.50**	Wt. 35	Capacity	1 to 4 gal.
No. 2	**5.00**	Wt. 40	Capacity	2 to 7 gal.
No. 3	**5.50**	Wt. 45	Capacity	3 to 9 gal.

Davis Swinging Churns

Swings like a pendulum. No machinery inside. Easily operated. Greatest concussion.

Sizes	Will Churn	
No. 1	4 gal. or less	**$12.00**
No. 2	5 gal. or less	**13.00**
No. 3	8 gal. or less	**15.00**

Butter Workers

Reids Patent Butter Workers

THE ORIGINAL PHILADELPHIA WORKER.
All Others Are Imitations.

Reid's Butter Worker is very efficient. It is simple in construction, easily operated and easily cleaned. It will work a batch of butter in from three to five minutes, according to the temperature and conditions, taking out all the buttermilk and thoroughly mixing in the salt, doing the work far better and quicker than can be done by hand.

It consists of a tray and roller. The roller is provided with paddles and is turned by a crank, traveling from one end of the tray to the other and back again by reversing the motion. It works on precisely the same principle as a hand paddle, but is superior to a hand paddle in the fact that it always presses and never slips over the grain of the butter.

The Reid Butter Worker is a standard dairy fixture; is built of best materials, with all iron parts galvanized to prevent rust, and with friction rollers on the clamps that run under the racks to hold the roller down. A perfect butter worker in every particular, and a great time saver.

PRICES

No. 1, 23x36 inches, capacity 50 lbs..... **$10.00**
No. 2, 20x30 inches, capacity 30 lbs..... **8.00**
No. 3, 17x27 inches, capacity 25 lbs..... **7.00**
No. 4, 14x23 inches, capacity 10 lbs..... **6.00**

Butter Wrappers

8x11 inches, plain.....**Per 1000, $1.00**
8x11 inches, printed.....**Per 1000, 2.50**
Special prices on lots of 5000 or more.

Butter Cartons

No. 1 Cracker Box Pattern **65c** per 100, **$5.50** per M
No. 1 Tuck End Pattern...**75c** per 100, **6.50** per M
Send for samples. Can be printed. Write for prices.

Reid Lafayette Butter Printer

The Lafayette is universally popular with creamerymen and large dairymen, receiving the **only award** at the **World's Fair** at Chicago, and is the most rapid printer in the world, with a record of 350 lbs. of butter per hour. It is self-gauging, and is used especially for reprinting butter. It was the only printer in use at the **Louisiana Purchase Exposition Operating Creamery, St. Louis.** Saves time over the so-called gang prints, and always gives a well-formed and even print.

To operate, press the box, which is level with top of table, full of butter, working it in solid, using the lever, then stroke it off level with a paddle, raise the lever and throw it all the way back, which raises the butter out of the box nicely printed.

There are screws in the bottom of the print block, and also in the bottom of the follower, for adjusting the weight of the butter, which it does more exactly than if weighted.

Prices of Lafayette Printers

For either lb. or ½ lb. printer, without table, **$10.00**
For either lb. or ½ lb. printer, with table, complete.....**$15.00**

Reid's Self-Gauging Butter Printer

The Reid Self-Gauging Butter Printer is designed not only to print the butter, which it does very neatly and quickly, but also to weigh or gauge it into pounds or half-pounds, as desired. This it does in one-quarter the time it can be done by hand, making the prints neater and of uniform weight. As the moulds are square, they will be found very convenient to pack for transportation.

The Printer consists of a base-board, 7x14 inches, to which is bolted an upright iron frame, 20 inches high, and to this is secured the box and hopper; also, the lever and plunger rod. The print block (which constitutes the bottom of the box) has a broad handle, and rests upon the base-board. The weight is regulated by the screw on the print stem and the stop on plunger rod, in connection with the escape hole in the side of the box.

We strongly advise the use of name, monogram or initials on the print block, to prevent imitation. This is of great value, as the special brand becomes a trade-mark and the butter commands a higher price.

PRICES

For one-half pound Printer.....**$12.50**
For pound Printer..... **12.50**
For both pound and half-pound Printer, combined..... **15.50**
For two-pound Printer..... **13.50**
$1.00 extra for initials or monogram.

The regular size of a half-pound print is 3⅝x2 ¼ x1⅛ inches; of a pound print, 4 ¾x2 ½x2 ½ inches; of a two-pound print, 6x3 ¼x3 inches. Special sizes can be made to order.

Excelsior Butter Mold

This improved Butter Mold and Stamp is self-weighing or gauging. The adjustment is regulated by a collar that moves up and down on the upright standard and is kept in place by a set screw. The slide is readily moved in and out by a simple motion of the middle finger.

This process of printing is very rapid. With little practice, a person can easily mold from ten to fifteen prints per minute.

Gives accurate weights when rightly adjusted.

Price, each, $3.00

Economy Butter Mold

All wood. Brass screws.....**Each, $2.00**

Butter Color

Perfection

2 Oz. Bottle..... **$0.25**
1 Qt. Can..... **.80**
½ Gal. Can..... **1.45**
1 Gal Can..... **2.50**

Wells & Richardson Co.'s Dandelion Brand

3 ¾ oz. Bottles.....**25c**
1 gal. Cans.....**$2.75**

Rennet Tablets

Box of 2 doz.....**50c**

Sanitary Tinware

CREAM PAILS	Each
3 gallon	$1.25
5 gallon	1.50

MILKING PAILS	
12 qt. Plain Open Pattern	.75
12 qt. Plain Strainer Pattern	.85
14 qt. Sanitary Open Pattern	1.00
14 qt. Sanitary Fishmouth Pattern	1.75
14 qt. Seamless Open Pattern	1.60
14 qt. Seamless Fishmouth	2.25
14 qt. "Sterilac" Sanitary	2.50

The "Sterilac" Pail is endorsed by leading dairyman and Health Boards. Ask for special descriptive pamphlet.

MILK STRAINERS	
3 qt. Seamless for pan	1.00
6 qt. Seamless for pan	1.25
10 qt. Seamless for pan	1.50
10 qt. Buhl Seamless Can Strainer	1.50

MILK STIRRERS	
Sampler Pattern	.75
Perforated Pattern	.75

MILK DIPPERS	
1 qt. Heavy, Long Handle	$1.00

SHIPPING CANS (Write for Prices in quantities).		Each
5 gal. Climax	10 ½ lbs	$2.00
10 gal. Climax	16 ½ lbs	2.40
8 gal. Iowa	12 lbs	2.60
10 gal. Iowa	20 lbs	2.75
5 gal. Elgin	13 lbs	2.25
10 gal. Elgin	22 lbs	3.00
8 gal. Duro	21 lbs	2.75
10 gal. Duro	23 lbs	3.10
5 gal. Elgin Lock Cover	14 lbs	2.75
10 gal. Elgin Lock Cover	23 lbs	3.50

DELIVERY CANS, Side Handle, Chained Cover	
1 gal. XXX Tin	$1.10
2 gal. XXXX Tin	1.15
3 gal. XXXX Tin	1.60
1 gal. "Reno" Steel	1.25
2 gal. "St. John" Steel 7 lb	1.75
3 gal. "St. John" Steel 7 ¾ lb	1.75
3 gal. "St. Francis" Steel 6 lb	1.75

Sanitary Bottle Delivery Cases

Reinforced Wood

Holds	Each
12 Quart	$1.25
15 Pint	1.25
15 Half Pints	1.35

Galvanized

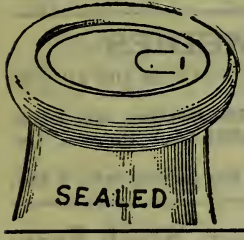
Holds	Each
12 Quarts	$2.00
15 Pints	2.00
15 Half Pints	2.15

GALVANIZED BOTTLE CARRIERS—With handle—holds 6 bottles 1.00
GALVANIZED BOTTLE CARRIERS—With handle—holds 8 bottles 1.50

Milk Bottles

Best Flint Glass. High neck which shows maximum cream line.

Quarts	$1.00 Doz.	$9.90 Gross
Pints	.75 Doz.	7.20 Gross
½ Pints	.65 Doz.	6.10 Gross



Bottle Caps

Round, no lift . . . **1000, 35c**
Perfection lift **1000, 40c**
Lipped **1000, 37c**

Write for samples and special prices on caps, **printed to order with your name and address.**

Red Cross Filter Cloth

Woven cloth with cotton on one side, ready for use, rolled in sealed cases; 17 inches wide, 20 feet long. Sample on request. **Roll, 60c**

Diamond Crystal Salt

The salt that is all salt. The only salt over 99 % pure. Made especially for buttermakers.
14 lb. bag, 40c; 280 lb. barrel, $4.50

Stock Salt

Half Ground Rock Salt

50 lb. bag	$0.60
100 lb. sack	1.00

Leslie Brick Salt

5 lb. Brick	$0.15
8 lb. Brick	.20

Rock Salt

Per 100 lbs	$1.50

Wyandotte Dairyman's Cleaner and Cleanser

5 lb. Sack	30c
80 lb. Kegs	$5.00 per 100 lbs.
Single Bbl. 280 lbs., at	3.87 ½ per 100 lbs.
Five Bbl. lots, at	3.72 ½ per 100 lbs.

Your Money Back

Get a sack of WYANDOTTE DAIRYMAN'S CLEANER and CLEANSER —use **all** of it—and if it is not perfectly satisfactory—return the empty sack and we will refund you your money.

Stanchions

Wood Lined or Tubular Cow Stanchions $2.15

Special Catalog of Stanchions, Stalls and Litter Carriers on application

"More MONEY from your COWS"

A Handbook for Cow Owners, describing the diseases that affect a cow's productivity and telling how to prevent and cure them in a single cow or a whole herd.

FREE on Request

KOW KURE is different from anything ever discovered for cow troubles. It is the only cow medicine that is strictly for cows only. It is not a stock food, but a specific remedy especially for cow diseases, such as Barrenness, Scours, Milk Fever, Caked Udder, Bloating, Red Water, Swelling of the Bag, etc. It prevents abortion and removes retained after-birth. It tones up the system, renews vitality, restores appetite to cows that are "off feed," and keeps them healthy. Makes poor cows good, good cows better, and makes more money for cow owners. It increases the milk flow, and enables the cows to produce strong, vigorous calves. It's the dairyman's gold mine, and a sure profit-payer.

Price, 50c, cans wt., 1 ¾ lbs., and $1.00 cans, wt., 3 ½ lb.

AMERICAN DAIRY ASSOCIATION REMEDIES

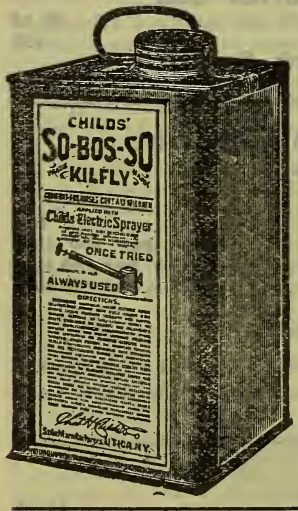
BAG BALM.—A soothing, penetrating ointment for all affections of the bag.
50c packages, wt., ½ lb.

GRANGE GARGET CURE.—An unsurpassed and positive cure. **50c cans, wt., 2 lbs.**

HORSE COMFORT.—For wire cuts and all flesh wounds.
25c bottles, wt. 1 lb., 50c bottles, wt. 2 lbs.

AMERICAN HORSE TONIC.—A general improver for horses.
25c boxes, wt., 1 lb.; 50c boxes, wt., 2 lbs.

Increases Milk Production 20% **So-Bos-So** *Protects Stock From the Torture of Flies*



YOUR cows will give more milk—your horse do more work on less feed if protected by So-Bos-So at a cost of less than ½ cent a head per day.

Horses hitched or harnessed will stand quietly or work in comfort if protected by So-Bos-So, and many run-aways will be avoided. So-Bos-So is a boon to blacksmiths.

So-Bos-So is easily and quickly applied with a hand sprayer, cloth or sponge and is the only really efficient "fly bouncer" that we have ever seen.

Be sure to look for the trade-mark as there are many preparations offered that will prove disappointing.

Price **So-Bos-So is sold in one gallon sealed tins only, weight 10 lbs., at $1.25.**

☞ HAND SPRAYERS, POWDER BLOWERS and SPRINKLERS—Page 98

BLATCHFORDS CALF MEAL

A perfect Milk Substitute at ⅓ the cost—will push Calves and Colts ahead quicker than any other food.

100 lbs. Makes 100 Gals. of Complete Milk Equal.

Blatchfords Calf Meal is a thoroughly steam cooked food for calves, to take the place of cows milk, contains all the elements of whole milk, yet costs less than skim milk. Calves and colts are healthier hardier and grow faster when fed on Blatchfords calf meal. Ask for the Blatchfords booklet and learn how others made big profits raising calves on Blatchfords meal.

PRICES: 25 lbs., $1.40; 50 lbs., $2.60; 100 lbs., $4.95

BLATCHFORDS PIG MEAL

The Perfect Milk Substitute for Young Pigs

At weaning time Blatchfords pig meal will safely carry the young pigs from the sow to the pasture and coarse feed, **and there will be no runts,** a pound of pig meal costing less than 5c makes a gallon of perfect milk equal. Keeps the pigs healthy and growing strong. Booklet and full information on **Request. Prices, 25 lbs., $1.40; 50 lbs., $2.60; 100 lbs., $4.95.**

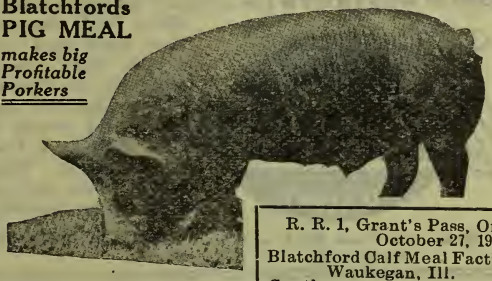
BLATCHFORDS LAMB FOOD

Lambs demand a careful weaning, needing a milk diet for the change to ordinary food. Blatchfords Lamb Food is an ideal ration and imitation Ewes milk. **Prices, 25 lbs., $1.40; 50 lbs., $2.60; 100 lbs., $4.95.**

BLATCHFORDS MILK MASH

Baby chicks started on this imitation milk will grow and thrive rapidly and be free from bowel trouble. Contains no drugs. **Prices, 25 lbs., $1.50; 50 lbs., $2.60; 100 lbs., $4.95.**

Blatchfords PIG MEAL
makes big Profitable Porkers

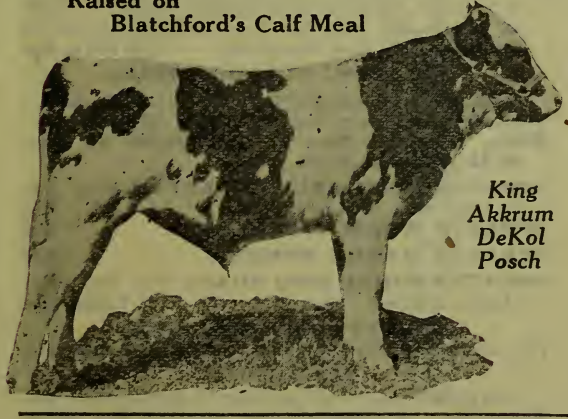


ROYAL LEE 25th
Jr. Champion Boar
Oregon State Fair, 1914
Raised on Blatchford's Pig Meal

R. R. 1, Grant's Pass, Ore.
October 27, 1914.
Blatchford Calf Meal Fact'ry
Waukegan, Ill.
Gentlemen:
I have been using your Pig Meal as a milk-substitute for young pigs and find it the best milk-substitute that we can buy. Royal Lee, 25th, the Junior Champion boar of the 1914 Oregon State Fair was fitted on Blatchford's Pig Meal.
(Signed) F. R. STEEL.

RAISED ON BLATCHFORDS

Raised on Blatchford's Calf Meal



King Akkrum DeKol Posch

Brookside Stock Farm
Pure Bred Holstein-Friesian Cattle

Moravia, Ida., March 20, 1915.

For the past three years we have been raising our pure bred Holstein calves on "Blatchfords" Calf Meal and have found it not only better but cheaper than other calf feeds. The enclosed pictures of "Blatchford Meal Calves" will give you a better idea of our success with your calf meal than anything that we could write.

BROOKSIDE STOCK CO.,
per W. J. Hoagland.

Eugene, Oregon, Aug. 7, 1915.

Inclosed find picture of Jersey calf raised on Blatchfords Calf Meal **since she was 10 days old.** *Has not had a drop of milk since meal was fed. This picture shows her at six months—weight* 295 *lbs.*

J. J. LIGHT.

Proteina (Soy Bean) Oil Meal

46 Per Cent Protein, 10 Per Cent Fat.

Contains 4 times the feeding value of grain. A most valuable and satisfactory concentrated food for cows, calves, pigs, poultry and all farm animals; superior in every way to Linseed Oil Meal. Full information and descriptive literature on request. **Price, lb., 5c; 50 lbs., $1.50; per 100, $2.25.**

OIL CAKE MEAL
Price, per lb., 5c; 50 lbs., $1.50; 100 lbs., $2.50.

Dried Beet Pulp

To be fed dry or moistened. Dry shredded sugar beets improved in feeding value by removal of the sugar. Fed half and half with other grains will greatly increase the milk flow. Highly recommended for dairy and show stock; a safe, economical food.

Price, per lb., 3c; 50 lbs., 90c; 100 lbs., $1.50;

Write for Prices on ton lots.

"BACILLI-KILL"

A Colorless, Ordorless, Non-poisonous Germicide, Disinfectant and Sterilizer Especially Adapted for Dairy and Creamery Use

Bacilli-Kill has over ten times the germ-killing power of undiluted carbolic acid. It is clear as water, free from oils and sediment, contains no poisons or acid, and imparts no taint or smell to contents of containers purified with it.

"BACILI-KIL is a combination of hypochlorites stabilized by electrolysis. In our limited space, we cannot tell you all of its many uses. Ask us to send you special booklets.

SOLD ON AN ABSOLUTE GUARANTEE TO GIVE SATISFACTION OR MONEY REFUNDED

Prices, boxed for shipment, f. o. b. Spokane.

5 gal. jug.....$2.50 **5 gal. carboy $11.00**

Dilutes 1 oz. to the gallon and more according to purpose

☛ Every package bears manufacturer's guaranty, its phenol coefficient, and full directions for use. Refuse any disinfectant which does not show on the package its phenol coefficient and remember that "BACILI-KIL" has a phenol coefficient of 10 plus, or ten times the germ-killing power of carbolic acid.

"MEDICO" Tonic and Worm Destroyer

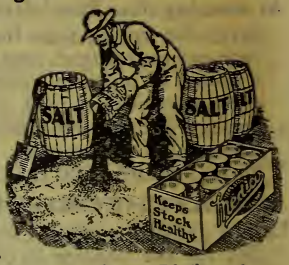
80% of all stock losses are due to worms—only healthy animals respond to feeding—wormy stock will not thrive—your money is fattening worms.

MEDICO DESTROYS the dreaded intestina and stomach worms and expels them from the system, tones up the digestive tract and keeps them away. Horses, cattle, sheep, hogs, all must have salt, a package of Medico mixed with 70 lbs. of salt makes the most perfect medicated salt tonic and worm destroyer possible to obtain, and at a fraction of the cost of such preparations. Keep this salt before your stock, they will use the proper amount to keep them healthy.

KEEPS STOCK Medico HEALTHY

Be sure this Trade Mark is on the package.

PRICE, 5 lb. pkg. (mailing weight 6 lbs.), **$1.25.**



5 lb. pkg. to 70 lbs. salt

Spratt's Dog Foods and Remedies

"SPRATT'S" MEAT "FIBRINE" VEGETABLE DOG CAKES.

The standard dog food. Used at the leading kennels and dog shows throughout the world; a staple and constant food for all breeds of dogs.

Price: Cartons, 30c; 25 lbs., $2.40; 50 lbs., $4.50; 100 lbs., $8.50.

"SPRATTS" PUPPY BISCUITS.

A perfect and whole food for puppies of all breeds.

Price: Cartons, 35c; 25 lbs., $2.65; 50 lbs., $5.00; 100 lbs., $9.00.

SPRATT'S TONIC and CONDITION TABLETS

To build up after sickness and to put in bench show form, etc. **50c**

We are selling agents for these famous preparations which have the endorsement of the big Breeders and Fanciers—and are the standard in their line.

We can only list a few items in this catalog, but will mail **free to Dog owners, "Spratts Dog Culture,"** which gives reliable and interesting advice and information on the care of dogs and tells about "Spratts" preparations.

SPRATTS PLAIN PUPPY MEAL—The Standard Weaning Food. This meal should be used before, during and after the weaning period to insure large, vigorous and healthy puppies. Also an invaluable food for dogs of any age out of condition. Follow directions. **Cartons, 10c**

"SPRATTS" BULLDOG MEAL.

Specially prepared for dogs of this type, also a valuable temporary diet for dogs "off feed."

Price: Cartons, 25c; 25 lbs., $2.50; 50 lbs., $4.25; 100 lbs., $8.00.

SPRATTS DISTEMPER TABLETS.—May also be used as a preventive. **75c**

SPRATTS WORM CAPSULES. **50c**

SPRATTS MANGE REMEDY. **50c**

SPRATTS WHITE DOG SOAP.—For fleas, etc. Makes a glossy coat. **Cake, 25c**

SPRATTS POULTRY SOAP

For washing poultry, pigeons, canaries. **Price, 25c**

ZENOLEUM

One gallon makes 100 gallons of disinfectant and deodorizer. A standard hog, poultry and sheep dip. 8 oz. tins, **25c;** quarts, **50c;** half gal., **90c;** gal., **$1.50.**

ZENOLEUM LOUSE POWDER

Price, 16 oz. net, **25c**

Avenarius Carbolineum

Lice and mite exterminator. Wood preservative. This is the genuine German stock, and is quoted subject to stock on hand only. Qts., **50c;** gal., **$1.50;** 5 gal., **$7.00.**

☛ **Complete list of SPRATTS DOG and CAT FOODS and REMEDIES on request.**

The cheapest, surest way to kill out moles, gophers and squirrels.

KILMOL
SQUIRLGOPHENE

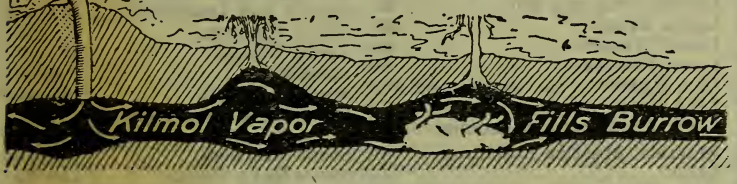
Used in the U. S. DESTRUCTOR. Costs but 18 to 28 cents per acre, less than 1 cent in money, 1 minute in time for each burrow!

"KILMOL" is the trade name of a powerful chemical combination discovered by the United States Government experts, that generates a deadly gas fatal to moles, gophers, ground squirrels, etc. The same experts devised the **U. S. Destructor,** a vaporizer for the rapid and economical use of **"Kilmol,"** and repeated tests have proven "Kilmol" in the U. S. Destructor 100 per cent efficient; in fact, it "Kills 'em all." Anyone can safely and effectively use "Kilmol" and get perfect results. The **U. S. Waste Balls** saturated with "Kilmol" and placed in the runs will prove effective if only a small area is to be treated.

PRICE: "Kilmol" 1 gal. (10 lbs.), $2.00; 5 gals. (55 lbs.), $7.25; 55 gals. (550 lbs.), $70

KILMOL WASTE BALLS

as used by the U. S. Govt. Saturate with **"Kilmol"** and drop in the holes; an inexpensive, simple and sure way to kill moles, squirrels, etc. **Waste Balls, 60c per 100.** Weight, 100 balls, 2 lbs.



The U. S. DESTRUCTOR

With 3½ Feet of Hose and Carrying Strap.

The official vaporizer designed by the U. S. government. Made of the best material—built for lasting service. Wt., packed, 35 lbs.

PRICE, $13.00 f. o. b. Spokane.

KILMOL is a standard U. S. Gov't formula and NEVER FAILS.

SQUIRREL POISON—New U. S. Government Formula.

U. S. GOVERNMENT, Dept. of Agriculture, has perfected a method of poisoning grain so the bitter taste of the strychnine is not apparent until too late for the animal to get rid of it, as the poison has been absorbed through the cheek pouches. POISON CANNOT BE MAILED.

PRICES: 1-lb. tin, 40c; 5-lb. tin, $1.30; 50-lb. drum, $7.00; 100 lbs., $12.75

For GOPHER and MOLE TRAPS, "WOODLARK" SQUIRRELL POISON, TRAPS, GUNS, ETC. See Pages 87 and 88.

International Stock and Poultry Foods, Remedies, Etc.

Every package of **"INTERNATIONAL"** is guaranteed to fulfill every claim made for it, or your money back for the asking. We sell **"INTERNATIONAL"** on its merits. You are the judge. Full directions on each package.

For Poultry

INTERNATIONAL POULTRY FOOD.
Pkgs., 25c, wt., 2 lbs.; 50c, wt., 4 lbs.; and $1.00, wt., 7 lbs.; 25-lb. pail, $3.50.

INTERNATIONAL LOUSE KILLER.
Wt., 2 lbs.; Pkg., 25c

INTERNATIONAL LICE PAINT.
35c cans, wt., 3 lbs.; 60c cans, wt., 5 lbs.

INTERNATIONAL SCALY LEG OINTMENT.
Box, 25c, postpaid

INTERNATIONAL CRESUL.
Wt., pk'd., 1 lb.; ½-pint can, 25c

INTERNATIONAL ASEPTIN.
Per box, 25c, postpaid

INTERNATIONAL ROUP CURE.
Per box, 50c, postpaid

INTERNATIONAL RHEUMATISM OIL.
Per bottle, 25c

INTERNATIONAL SUDAL. Box, 25c, postp'd

INTERNATIONAL CHOLERA CURE.
Per bottle, 25c

INTERNATIONAL WORM PILLS. 50c, postp'd

INTERNATIONAL BOWEL TROUBLE REMEDY. Per box, 50c, postpaid

For Stock

INTERNATIONAL STOCK FOOD.
Pkg., 25c, wt., 2 lbs.; 50c, wt., 4 lbs.; 7-lb. pkg., $1.00; 25-lb. pail, $3.50.

INTERNATIONAL HEAVE CURE.
Wt., 1¼ lbs.; Pkg., 50c

INTERNATIONAL GALL CURE.
Box, 25c; 50c, welght, 10 ozs.

INTERNATIONAL WORM POWDER.
Pkg., 50c, welght, 1¼ lbs.

INTERNATIONAL PHENO-CHLORO.
25c, wt., 1 lb.; 50c, wt., 2 lbs.; $1.00 cans, wt., 3 lbs.

INTERNATIONAL HARNESS DRESSING.
Price, 25c, welght, 2 lbs.; large can, 50c, welght, 3 lbs.

INTERNATIONAL HONEY TAR FOOT REMEDY.
50c can, wt., 2 lbs.; $1.00 cans, wt., 3 lbs.

INTERNATIONAL COLIC CURE.
50c, wt., 2 lbs.; $1.00 bottles, wt., 3 lbs.

INTERNATIONAL SILVER PINE OIL.
25c, 1 lb.; 50c, wt., 2 lbs.; $1.00 bottles, wt., 3 lbs.

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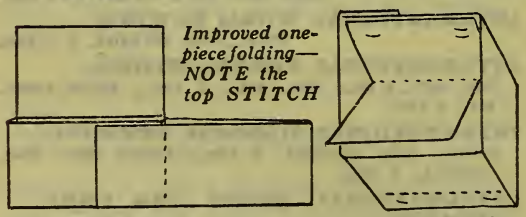
HARDY SPRING FLOWERING BULBS are inexpensive, require little care and will permanently add to the beauty and value of your home. For select list of Ornamental and Flowering Shrubs, Hollies, Evergreen, Fruit and Shade Trees see our 64-page Autumn Catalog. Free on request.

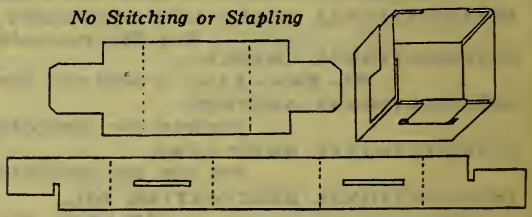
BERRY BOXES AND CRATES



Improved one-piece folding—NOTE the top STITCH

TOP STITCHING the one-piece bottom makes the box open up perfectly. No loss from misfits and breakage as with the old style, and the bottom never drops out. *Compare this new box with any box on the market.* Prices on request.

No Stitching or Stapling



New—TWO PIECE FOLDING BOX

Sets up quicker than the two pieces of a stitched hallock can be brought together, and holds better. *The price is so low you can't beat it with any box.* Write for prices on filled or K. D. crates or hallocks.

Prices Right, Deliveries Prompt Let us supply you the splendid line of the *Pacific Fruit Package Company*

PRINTED BY JAMES, KERNS & ABBOTT CO., PORTLAND, OREGON

From.....

P. O. .....

SPOKANE SEED CO.

SPOKANE

WASH.

DAIRY, POULTRY AND BEE SUPPLIES

Trees
Plants
Roses

Tools
and Spray
Pumps

MANUFACTURERS
OF
FERTILIZERS

BOOKS ON GARDENING, POULTRY, ORCHARD, GREENHOUSE and FARM MANAGEMENT

We have a complete library of the latest works of recognized authorities. For list see General Catalog

ORDER SHEET — Spokane Seed Company, — Spokane, Wash.

WRITE YOUR ADDRESS PLAINLY IN THE BLANKS BELOW; also keep your order separate from other matters you may wish to write about. This enables us to FILL ORDERS RAPIDLY and correctly, and answers to your inquiries will not be delayed or overlooked

Please read "How To Order" (Page 1) Before ordering, and save all misunderstanding. DON'T FORGET TO SIGN YOUR NAME

Do not write in this space

Name _____

Post Office _____ Rural Route No. _____

Station _____

County _____ State _____

Date _____ Amount Enclosed, $ _____

Forward by _____

State if wanted by mail, Express or Steamer

Do not write in this space

☞ In Ordering Peas, Beans and Corn by the Pound to be Sent by Mail, be Sure to Add the Postage

Quantity	Name of Articles Wanted	Price	
	Amount Carried Forward,		

NOTE.--We use every precaution in procuring fresh, pure and reliable seeds, etc., but we, in common with other responsible seed houses, sell our goods subject to the following disclaimer, it being that adopted by the American Seed Trade Association, i. e.:--We give no warranty, expressed or implied, as to description, quality, productiveness or any other matter of any seeds, bulbs, nursery stock, roots or plants we send out, and will not be in any way responsible for the crop. If the purchaser does not accept the goods on these terms they are to be returned at once.--Spokane Seed Co.

Quantity	Name of Articles Wanted	Price	
	Amount Brought Forward.		
	TOTAL AMOUNT OF ORDER.		

CATALOG

Seed | Nursery | Poultry | Bee | Dairy

If you will fill in the spaces below with the names and addresses of ten of your neighbors who buy **Seeds, Plants, Bee or Poultry Supplies, Fertilizers, Sprays or Spray Pumps,** you may, with your first order of 25 cents or over, select free of charge any two 5 cent papers of seeds that we list. We rely upon your honesty to send us good reliable names. Please put **X** in the left hand column under the name of the catalog you think will interest them most.

Names	Post Office	Rural Route Number	State

—State what premium you want, otherwise none will be sent.—

Parcel Post Rates

PARCEL POST RATES are based on **DISTRICTS** and **ZONES.** **THE DISTRICT** includes the office where mailed and the rural routes therefrom.

A DISTRICT RATE OF 5 CENTS for the **first pound** and **1 cent** for **each additional** two pounds or fraction thereof up to **50 pounds** (the district weight limit) is charged between points in this district.

THE 1ST ZONE covers a radius of **50 miles** from the point of mailing; the rates are **5c for the first pound** and **1 cent for each additional pound** or fraction thereof, up to the **limit of 50 pounds.**

THE 2ND ZONE covers a radius of **150 miles,** and the rate is **5c for the 1st pound** and **1 cent** for each additional pound or fraction thereof; **weight limit of 50 pounds.**

☛ **A WEIGHT LIMIT OF 20 POUNDS APPLIES TO THE 3rd, 4th, 5th, 6th, 7th and 8th zones.**

ZONE RATES increase with the distance—see table.

WHEN YOU ORDER FROM SPOKANE look for the Zone that corresponds to the distance you are away. Then note where the weight of your package is marked on the table of rates, on the same line under your ZONE will be shown the amount of postage to be added when ordering. We have catalogued the weight of most items mailable by parcel post, and by the aid of the table here shown you can always figure your postage.

SIZE AND WEIGHT.

A Parcel Post package may weigh from 4 ounces to 50 pounds for the first and second zones—with a 20 pound weight limit for third to eighth zones, and must not exceed in size 84 inches in length and girth combined.

Four ounces or less will be charged for at 1c per ounce or fraction thereof, except on Books, Seeds, Plants, Bulbs, etc., which are 1c for 2 ozs. up to 8 ozs. for any distance.

SEEDS, BOOKS, ETC.—Seeds, Plants and Books over 8 ozs. and other 4th Class matter over 4 ozs. are charged at pound rates, a fraction being charged as a full pound.

WEIGHT	1st Zone		2nd Zone	3rd Zone	4th Zone	5th Zone	6th Zone	7th Zone	8th Zone
	Local rate	Zone rate 50 miles	50 to 150 miles	150 to 300 miles	300 to 600 miles	600 to 1000 miles	1000 to 1400 miles	1400 to 1800 miles	All over 1800 miles
1 pound				$0.06	$0.07	$0.08	$0.09	$0.11	$0.12
2 pounds				.08	.11	.14	.17	.21	.24
3 pounds	Local Zone			.10	.15	.20	.25	.31	.36
4 pounds	Rate 5c			.12	.19	.26	.33	.41	.48
5 pounds	for first	First and		.14	.23	.32	.41	.51	.60
6 pounds	pound	Second Zone		.16	.27	.38	.49	.61	.72
7 pounds	1c for	Rate 5 cents		.18	.31	.44	.57	.71	.84
8 pounds	each ad-	for the		.20	.35	.50	.65	.81	.96
9 pounds	ditional	first pound		.22	.39	.56	.73	.91	1.08
10 pounds	two	and		.24	.43	.62	.81	1.01	1.20
11 pounds	pounds	1 cent for		.26	.47	.68	.89	1.11	1.32
12 pounds	up to	each		.28	.51	.74	.97	1.21	1.44
13 pounds	the	additional		.30	.55	.80	1.05	1.31	1.56
14 pounds	limit,	pound		.32	.59	.86	1.13	1.41	1.68
15 pounds	50	up to the		.34	.63	.92	1.21	1.51	1.80
16 pounds	pounds	weight limit,		.36	.67	.98	1.29	1.61	1.92
17 pounds		50 pounds		.38	.71	1.04	1.37	1.71	2.04
18 pounds				.40	.75	1.10	1.45	1.81	2.16
19 pounds				.42	.79	1.16	1.53	1.91	2.28
20 pounds				.44	.83	1.22	1.61	2.01	2.40

The 8th zone rate applies to ALASKA, HAWAII and the PHILIPPINES with 20 lb. wt. limit—To MEXICO with 11 lbs.; CUBA, 4 lbs. 6 oz.; PANAMA, 4 lbs. 6 oz.

Postage to Canada on 4th class pkgs. of over 4 oz. and NOT EXCEEDING 4 lbs. 6 ozs., go at 8th zone rate.

Our FREE PREMIUMS Your Own Selections

As an expression of our good will and appreciation of your business we offer these premiums.

☛ **If you wish to take advantage of these premium offers, be sure to make your selections when sending in your orders; otherwise they cannot be sent.** *They are given only with cash orders, at catalog prices.*

With a $2.50 order Your choice of Vegetable or Flower Seeds in packages or ounces to the value of 25c, or any 25c Lily, Dahlia, Canna or Gladiola Bulb.

With a $5.00 order Double the $2.50 Premium, or any 25c book, or 25c to apply on any book we list, or your choice of any 25c package of Stock or Poultry Food or Remedy, or any of our Seed Potatoes, or Flowering Bulbs to value of 50c.

With a $10 order You may double the premiums on the $5.00 order or choose any 50c book in our list.

With a $25 order Three times the premium on the $10.00 order or $1.50 to apply on any additional item selected.

☛ **NOTE.—The amount allowed on premiums cannot be deducted from the price, but is allowed over the amount of the order.**

IF YOU SELECT PREMIUMS LISTED ABOVE YOU ARE NOT ENTITLED TO OUR SPECIAL DISCOUNT OFFER BELOW ON SEEDS IN PACKETS AND OUNCES.

Special Rates on Seeds in Packets or Ounces—Postpaid

25 cents Worth of Seeds FREE with every $1.00 order for Seeds in Packets and ounces. Remember, in packets and ounces only. $1.25 for $1.00, $2.50 for $2.00, and so on. This does not apply on quantities over one ounce, or where any other premium is taken.

We pay one cent (in seeds) per name for good addresses. See back of Order Sheet.

☛ **NO PREMIUMS on GRASSES, GRAINS or FOODS, which are subject to market changes**

ROSES
BULBS

TREES AND
PLANTS

SEE PAGE 105

Fertilizers
Sprays
Poultry and
Bee Supplies

SPOKANE
Diamond SEED Quality
COMPANY
TRADE MARK

SPOKANE, WASH.